ENDANGERED SPECIES ACT REAUTHORIZATION—SAN ANTONIO

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Endangered Species Act Reauthorizat...

SUBCOMMITTEE ON ENVIRONMENT
AND NATURAL RESOURCES

OF THE

COMMITTEE ON MERCHANT MARINE AND FISHERIES HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

ON

IDEAS, CONCERNS, AND RECOMMENDATIONS WITH REGARD TO THE ENDANGERED SPECIES ACT

JULY 6, 1993—SAN ANTONIO, TEXAS

Serial No. 103-37

Printed for the use of the Committee on Merchant Marine and Fisheries

U.S. GOVERNMENT PRINTING OFFICE

72-118 ⇆ WASHINGTON : 1993

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-041531-4

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CONTENTS

ENDANGERED SPECIES REAUTHORIZATION—SAN ANTONIO

TUESDAY, JULY 6, 1993

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES, COMMITTEE ON MERCHANT MARINE AND FISHERIES,

San Antonio, Texas

The Subcommittee met, pursuant to notice, at 1:15 p.m., in the Henry B. Gonzalez Convention Center, Centro room A & D, San Antonio, Texas, the Honorable Greg Laughlin, [chairman] presiding.

Present: Representatives Laughlin, Fields, and Bonilla.

Staff present: Lesli Gray, Gina DeFerrari, Cyndy Wilkinson, and Harry Burroughs.

OPENING STATEMENT OF THE HONORABLE GREG LAUGHLIN, A U.S. REPRESENTATIVE FROM TEXAS

Mr. LAUGHLIN. I call this Merchant Marine and Fisheries Hearing for the Subcommittee on the Environment and Natural Resources to order.

I want to welcome everyone to this hearing that started this morning in San Marcos and is continuing this afternoon in San Antonio.

Mayor Wolff, before you proceed, I want to thank you on behalf of the whole Committee for your arrangements today for this hearing in San Antonio and for these nice accommodations. You are no stranger to this Committee, and we thank you for your past participation, and look forward to your testimony today.

I want to emphasize to everyone that the reauthorization of the Endangered Species Act is probably one of the most debated issues this past year. My good friend, Jack Fields, Congressman from Humble, representing the 8th Congressional District seated here with me and I asked Chairman Studds to allow us to have a field hearing in San Marcos and San Antonio to give the citizens of Central Texas an opportunity to express their ideas, concerns and recommendations with regard to the Endangered Species Act. We need to hear how Congress can make the Endangered Species Act work better for all of the people of Texas, while at the same time, protecting our very important environmental resources, such as the endangered species.

I believe that endangered species need to be protected, but before their populations are so depleted that there is little hope for long-

term recovery. I also believe that consideration must be given to the social and economic aspects of species listing.

This field hearing in San Antonio was requested for several reasons, chiefly because of its proximity to an area of great concern to the Central Texas region, the Edwards Aquifer. This hearing, however, was not intended to discuss this issue exclusively. Rather, we hope to use the information gained through the testimony offered here in order to improve the Act.

I want to emphasize that I think that agriculture activities are important and should be given due consideration in any process allocating the water resources of the Edwards Aquifer. We heard from farming and ranching interests in San Marcos earlier today, along with housing, local Government and the shrimping industry. So, those people will not be testifying at this hearing today.

This is a very important hearing. I hope the witnesses and the groups they represent will offer their unique perspectives and some real suggestions for improvement of the Endangered Species Act. I would also welcome the witnesses today—that we will hear from a variety of interests, including State officials and representatives of economic and environmental interests. Due to the limited time of this hearing which we will conduct, witnesses have been granted only five minutes for their oral testimony. However, all of the witnesses have been encouraged and indeed they have in fact submitted much longer, much more detailed testimony in written form, which will be made a part of the record of this hearing. In addition, any of you that desire to submit written documentation to be made a part of the record, can do so up until August the 6th of this year, at which time the record of this hearing will be closed. Further, to give those of you who took the time out to attend this hearing, we have provided, outside on the table, a form for you to fill out, not only with your name and address, but your comments, suggestions that you may want to offer to those of us on the Committee.

Mr. LAUGHLIN. At this time I have—well, I will accept the other written testimony at a later point in the hearing. At this time, I would like to recognize the Honorable Nelson Wolff, Mayor of the city of San Antonio. Mayor, while I grew up in a very small town down on the Gulf of Mexico, I understand that San Antonio not only is one of the most historic cities in America, but is the 10th largest city. Welcome to our hearing.

Mr. WOLFF. Thank you, Chairman.

Mr. LAUGHLIN. Oh. Before I recognize the Mayor—a Congressional discourtesy for which I must apologize. I failed to recognize the Senior Republican on the whole Committee, my good friend and colleague, with whom I travel most weekends, from Washington, D.C. to the Houston Airport, my good friend Jack Fields from Humble, Texas, who represents the 8th Congressional District. Jack, I yield whatever time you may want to discuss.

Mr. FIELDS. Well, he was getting so wound up, I knew that he was going to forget me.

Mayor, I want to say to you that we have been involved with this particular issue for many months. I appreciate your leadership. I appreciate you helping us make the arrangements for this hearing.

I also saw in the room my former colleague, the Honorable Tommy Loeffler. I look forward to Tommy's testimony a little bit later.

I just want to make a few statements, and I will put the remainder of my statement in the record.

STATEMENT OF THE HONORABLE JACK FIELDS, A U.S. REPRESENTATIVE FROM TEXAS, AND RANKING MINORITY MEMBER, COMMITTEE ON MERCHANT MARINE AND FISHERIES

Mr. FIELDS. I think protecting threatened and endangered species of plant and animals, is a worthwhile goal, but I think there must be a balance between protecting a species and protecting the rights of ordinary Americans and ensuring their survival. Instead of taking a balanced, a proactive, and a coordinated approach to protecting plants and animals, the existing law takes what can best be described as an emergency room approach. Furthermore, the Act is being used to halt economic development and to abuse the rights of private, ordinary citizens. I think you would be hard-pressed to find a better example of this particular type of abuse than here in San Antonio and this entire region.

The amount of water pumped from the Edwards Aquifer should not be regulated by the Federal Government, and the Endangered Species Act should not be used to prevent Texans from obtaining the most basic of human necessities, and that is the necessity of water. In fact, one of our State's most fundamental rights is the rule of capture—that a person controls the flow of water from below their own property.

In recognition of the Endangered Species Act's many short-comings, on March the 25th of this year, Congressman Billy Tauzin and myself introduced House Resolution 1490, the Endangered Species Act Procedural Reform Amendments. This legislation does not in any way weaken or undermine the Endangered Species Act. In fact, it would make this particular Act work better for all species, flora, fauna and just plain folks. One of the cornerstones of this bill is a provision to compensate property owners who lose the economic value of their land. Under current law, a private citizen can be denied the use of their property if an endangered or threatened species is found on that property. The only recourse for a property owner is a long and costly trip to the U.S. Court system, a trip that most property owners cannot afford.

Under the bill that Congressman Tauzin and I introduced, we would establish a system to quickly compensate ordinary citizens who are substantially denied the economic and viable use of their property, because of the presence of an endangered or threatened species.

I pointed this out in an earlier hearing today. My family has been on one piece of property since the 1860's. We do not want compensation. We want the ability to use our particular property. In putting this particular piece of language in the bill that we have introduced, we are not trying to create a brand new spending system for the Federal Government, we are trying to force the Federal Government to make the right decision. This bill also would allow the public an expanded opportunity to participate and comment on all recovery plans. It would require an economic assess-

ment of each recovery plan, so that Government is aware of the plan's cost to the public, its impact on employment and its affect on the use and value of private property. This piece of legislation would require the Secretary of Interior to review and comment on citizens' inquiries about proposed activity on their own property. This would empower the Secretary to issue grants to fund captive propagation programs for endangered or threatened species. Now, to me, this is the direction that we should go. A sensible and rational approach, recognizing the need to protect endangered or threatened species, but also recognizing the fundamental right of private landowners. That is the thrust of this particular piece of legislation.

I will place the remainder of my statement in the record.

[The prepared statement of Mr. Fields follows:]

STATEMENT OF HON. JACK FIELDS, A U.S. REPRESENTATIVE FROM TEXAS, AND RANKING MINORITY MEMBER, COMMITTEE ON MERCHANT MARINE AND FISHERIES

Mr. Chairman, it is a real pleasure for me to be here today, and I want to thank the distinguished Mayor of San Antonio, the Honorable Nelson Wolff, for his gracious efforts to coordinate this hearing.

I would also like to acknowledge our State's outstanding Agriculture Commissioner, Rick Perry, and my good friend, the former Congressman from the 21st District, Tommy Loeffler.

This is the second in a series of field hearings that our Committee is conducting on the Endangered Species Act. I believe San Antonio is an ideal location for this oversight investigation since few, if any, cities in America have been so adversely affected by this pervasive environmental law.

While protecting "threatened" and "endangered" species of plants and animals is a worthwhile goal, there must be a balance between protecting a species and protecting the rights of ordinary Americans and ensuring their very survival. That, unfortunately, ladies and gentlemen, is where the problems begin.

Instead of taking a balanced, proactive, and coordinated approach to protecting plants and animals, the existing law takes what can best be described as an "emergency room" or triage approach. Furthermore, the Act is being used to halt economic development and to abuse the rights of private citizens. Mr. Chairman, you would be hard pressed to find a better example of this type of abuse than what is happening right here in San Antonio.

Mr. Chairman, the amount of water pumped from the Edwards Aquifer should not be regulated by the Federal Government and the Endangered Species Act should not be used to prevent Texans from obtaining the most basic of human necessities: water. In fact, one of our State's most fundamental rights is the rule of capture—that is, persons control the flow of water on their land.

In recognition of the Endangered Species Act's many shortcomings, on March 25th, Congressman Billy Tauzin and I introduced H.R. 1490, the Endangered Species Act Procedural Reform Amendments. This legislation does not in any way weaken or undermine the Endangered Species Act. In fact, it would make the ESA work better for all species—flora, fauna, and just plain folks.

One of the cornerstones of H.R. 1490 is the provision to compensate property owners who lose the economic value of their land. Under current law, private citizens can be denied the use of their property if an endangered or threatened species is found on that property. Their only recourse is a long and costly trip through the U.S. court system—a trip most property owners simply cannot afford to take.

Under our bill, we would establish a system to quickly compensate ordinary citizens who are "substantially denied the economically viable use of their property" because of the presence of an endangered or threatened species.

Furthermore, H.R. 1490 would:

—allow the public an expanded opportunity to participate and comment on all recovery plans;

—require an economic assessment of each recovery plan so that the government is aware of the plan's cost to the public; its impact on employment, and its effects on the use and value of private property;

—require the Secretary of Interior to review and comment on citizens' inquiries about proposed activity on their lands; and

—empower the Secretary to issue grants to fund captive propagation programs for endangered or threatened species.

Finally, I want to compliment the City of San Antonio, and the various industrial, commercial, and agricultural interests, fro the passage of Senate Bill 1477. This legislation provides the mechanism to protect terrestrial and aquatic life over the Edwards Aquifer through regional management of the Aquifer.

The Texas State Legislature has clearly demonstrated that local and regional solutions should be encouraged in the reauthorization of the Endangered Species Act as an alternative to Federal intervention. In this case, the State of Texas, regional, and local authorities have demonstrated their full cooperation and it is time for that cooperation to be returned by removing the unreasonable application of the Endangered Species Act to the Edwards Aquifer water supply.

Mr. Chairman, if the real goal is to protect the Texas blind salamander and the fountain darter, then there is no reason why millions of these species could not be raised and then released into the wild, through programs modeled after the Texas Turtle Head Start Program. We can make these species the most prolific on the Earth and the language of H.R. 1490 would help to accomplish that goal.

Congress not only has an obligation to protect "endangered" or "threatened" species, it has an obligation to protect the property right of farmers, ranchers, and other citizens who depend on their land for their economic well being. We can have a strong Endangered Species Act without forcing hard-working Americans to wonder whether or not they will have access to enough water or whether or not they will be permitted to use their own property.

Mr. Chairman, a few miles from here stands the Alamo, on a hallowed piece of land, where Colonel William Barrett Travis drew a line in the sand. I want the people of San Antonio to know that I have drawn a line in the sand and that I will fight, with all my energy, for legislation reforming the Endangered Species Act. Private land owners must have at least as much right to use their property and water as does the fountain darter, the tuna cove cockroach, and the Texas blind salamander. H.R. 1490 would ensure that private property owners do not become the "endangered species".

Mr. Chairman, again, I am extremely pleased to be here in San Antonio and I look forward to hearing from our distinguished witnesses.

Thank you, Mr. Chairman.

Mr. LAUGHLIN. It will be an important part of the record, Jack. Thank you very much.

Mayor Wolff, please proceed.

STATEMENT OF THE HONORABLE NELSON WOLFF, MAYOR, SAN ANTONIO, TEXAS

Mr. WOLFF. Thank you, Chairman Laughlin and Congressman Jack Fields. Thank you both for coming to San Antonio to listen to our input regarding the Endangered Species Act. As Mayor of the ninth largest city, I welcome you to our city and appreciate this opportunity to tell you how the new Texas legislation establishing the Edwards Aquifer Authority will enable us to better manage our natural resources and also to comply with the intents and purposes of the Endangered Species Act.

Secretary Babbitt and I both supported, at your Washington, DC. hearing, regional management of the Edwards Aquifer, which has now been accomplished through the enactment of the Edwards Aquifer Authority State legislation. During the signing ceremony in Austin on July the 11th on the Edward Aquifer authority legislation, I was pleased to hear Secretary Babbitt announce that his agency was prepared to go back into Federal court and say Texas has taken control of its own destiny, and we are ready to pack our bags and get out of the courtroom. Now that the Fifth Circuit has dismissed the Aquifer Users Appeal, we believe it is appropriate that Secretary Babbitt officially advise Judge Bunton that the case should now be dismissed.

With the millions of dollars all of the lawyers have made in the Edwards Aquifer Case, we could have quadrupled our purchase of land for habitat. The Endangered Species Act has been used effectively to preserve lawyers, who are not an endangered species and not to help preserve the environment through the acquisition of additional land for habitat for endangered species. In fact, to complement the Edwards Aquifer legislation, the city of San Antonio participated in the purchase of Government Canyon, 4,800 acres of land over the aquifer, to be used for habitat. The city of San Antonio has worked hard to ensure the passage of the compromise legislation which created the Edwards Aquifer Authority.

Under this legislation, the Authority is to develop and implement, by June 1, 1995, a comprehensive water management plan that includes conservation, future supply and demand management plans to preserve this vital resource. All authorizations and right to withdraw water from the aquifer under the legislation will be limited to protect the water quality of the aquifer and the surface streams to which the aquifer provides stream flow; achieve water conservation; maximize the beneficial use of water available from the aquifer; protect aquatic and wildlife habitat, protect species that are designated as threatened or endangered, under applicable Federal or State law; and provide for in-stream uses, bays and estuaries without unreasonable court-imposed dictates, such as were imposed by Judge Bunton which, in effect, would cut back pumpage by 60 percent, requiring the largest water development project in the history of the State of Texas.

Let me just point out, in my own words, that is one real weakness of the Act. It takes into consideration one specific aspect of the environment when, in effect, if you interpreted it like Judge Bunton did, you would be tearing up thousands and thousands of acres of additional land to protect that one small habitat.

With this new legislation, we in Texas will be working hard to be good, responsible citizens; to maximize the beneficial use of water available for withdrawal from the aquifer; protect water quality; achieve water conservation; and protect endangered species without Court- imposed dictates. The next panel of witnesses will explain in greater detail this new legislation.

As you reauthorize the Endangered Species Act, we ask that you include provisions to assure that regional management plans like the Edwards Aquifer Authority legislation are allowed to work without unreasonable interference from Federal agencies, Federal District Court actions or suits by parochial interests.

The Chairman of your Committee, Representative Studds, has introduced legislation to reauthorize the Endangered Species Act, H.R. 2043, with a new Section 4 for Recovery Plan Improvements. Representatives Fields has joined with Representative Tauzin and other members of your Committee to introduce an alternate Endangered Species Reauthorization Bill, H.R. 1490. This bill provides for greater improvements to the recovery planning process. Representative Fields and Representative Bonilla have also introduced House Bill 888 to exempt sole source aquifers, like the Edwards Aquifer, from the taking or jeopardy provisions of the Endangered Species Act.

The city of San Antonio is interested in working with your Committee, as you develop endangered species reauthorization legislation, as we did with the Texas legislature, to enable the Federal Government to work with States, local governments and the private sector to help preserve the environment and to take into consideration economic and human concerns for an assured water supply and jobs. We are anxious to preserve our environment; but what we need is for your Committee, as you reauthorize the Endangered Species Act, to assure that the city of San Antonio and other cities are never again placed in a situation that we continue to face under Judge Bunton's interpretation of the Endangered Species Act.

The new Edwards Aquifer Authority legislation should be allowed to work, and protection of endangered species should be accomplished without massive economic disruption.

Thank you.

[The prepared statement of Mr. Wolff can be found at the end of the hearing.]

Mr. LAUGHLIN. Mayor Wolff, I first want to compliment, not only you for your leadership with the city of San Antonio, but many of the other wide and diverse groups who had an interest in the Edwards Aquifer, and certainly in my own State, Representative Ken Arbrest, who was very heavily involved. I think it was a great accomplishment, after the years of struggle and conflict and adversity and disagreement, that all of you came together to pass this new piece of Texas Legislation dealing with the Edwards Aquifer Authority.

The fear I had all along was that the groups would stay in combat and throw this problem to the Congress, which would have been far worse and very disastrous for the reason it would have gone to two committees—one, the Interior Committee, on which there is no Texan on the Committee, and the other was the Committee on which Jack is the Ranking Republican. He is from Humble, Texas, some distance from the Edwards Aquifer; Solomon Ortiz, from Corpus Christi, some distance; and Gene Green, from Houston, some distance; and I am the fourth and last member of the Committee. While I represent Hays County, where the aquifer is partially located, I live some 170 miles away—60 miles away in West Columbia. You all would have thrown this Texas problem in the laps of people who, for the most part, never heard about the Edwards Aquifer, probably would have done a great deal of harm to all of the interests involved. So, I think this is a great accomplishment on the part of all of you. I wanted to say that to you.

The second thing I would say to you is, as a result of this legislation, and since the signing of it, representatives of San Antonio have been in my office, where we met with representatives of the Corps of Engineers headquarters in Washington, D.C. The reason they were in my office is I am the only Member of Congress from this region of the State who is on the Public Works and Transportation Committee that has jurisdiction over the Corps of Engineers. Your representatives, and I am not saying they were there specifically representing the city of San Antonio; but they were representing the water interests of this region. Several were city of San Antonio residents. They were already working on the alternative

sources of water. I pledged my support and help and would try to work with the Corps of Engineers as we can. So, I think the mere fact they were there trying to address alternative sources of water is another tribute to this legislation.

I want to ask you a question about the sole source amendment that you talked about at the legislation. I have to tell you that those of us who live downstream, and that is all of the district that I represent, and you can generally say from Interstate 35 to the Gulf of Mexico, have concerns that the ninth largest city in America might draw it up dry and those of us—substantial agriculture interest and small towns who are not solely dependent upon Edwards, but somewhat dependent, could be damaged. Do you have a concern about that, if your city is allowed to go forward and only depend on the Edwards Aquifer for its water source?

Mr. WOLFF. Well, we do have a concern about that. All of us that worked on this legislation, we all gave up items that we would have perhaps not liked to have given up; but, we realized that, in the common interest of the farmers to the west of us, the city of San Antonio, and farmers down river, as well as the tourism industry that has been built up around Comal Springs and San Marcos Springs, that we had to try to reach a balance. I think we did that by providing in that legislation some control over future pumpage out of the aquifer.

Also, I think we, as a city, are responsible in looking ahead to the future to develop other water resources. As you know, we went through a traumatic election here about two years ago regarding a project called Apple White, that the citizens of San Antonio voted not to proceed with that project because of the nature in which it was being developed and the use that would be made of it. We have not moved forward with that project in terms of any construction and respected those wishes. At the same time, we have continued our legal actions for the condemnation, so we would have an asset worth something. We have decided to work with the Texas Water Commission, under Chairman John Hall, to sort out what are the best options, now that we can plan ahead. Is it Apple White in a reconfigured form, were it to be used not for drinking water, but for other purposes, or is there an interbasin transfer available that makes better economic sense?

We are committed to develop those resources, as well as our reuse program, to continue to expand it, our conservation. We are going to make good use of this aquifer, so that when generations, a hundred, 200, 300 years from now are going to be able to sit here and make good use of that aquifer and not ruin that aquifer.

Mr. LAUGHLIN. When you mention the Apple White Reservoir, I might suggest, if the city determines this is a very serious alternative, that you consider changing the name to Applegate, because Chairman Applegate chairs the Water Resources Subcommittee, which has jurisdiction over the Corps of Engineers. So, you will not have to change it a great deal, but you might get more support of it if you change it to Applegate.

Mr. WOLFF. Whatever direction that project may take, it would be one that we have made a good faith agreement with the voters that we would go back. In fact, we plan to go back and get an overall approval on whatever additional water resource that we devel-

op. The people of San Antonio will be offered that opportunity to participate in that decision.

Mr. LAUGHLIN. What is your assessment of the protection of agriculture interests—I know they are on both sides of the aquifer—by this bill, both from the economic and property interests?

Mr. WOLFF. Well, first of all, the farmers down river, in the area that you represent, I think certainly have a greater degree of comfort than they did before, because they saw an unlimited use of the aquifer, such as the catfish farm, which took one-fourth of our water supply, or that shortly, without too many years in the future, we would be over-pumping it.

The farmers to the west of us are concerned that there may be an attempt to buy all of their water supply and, hence, dry up the farming activities to the west of us. We have no intention to do that. We think that a marketable system of water rights will certainly help us in years where there is limited rain, close to drought situations, where we could make a deal with the farmers to perhaps lease their water rights and to use it during times when the rainfall is short, and pretty much like the program that the Federal Government has to pay a farmer not to plant in times of an overabundance of certain crops.

We think we can work with the farmers, where we will maintain that industry to the west of us; but, certainly, in times of short water, the ability to make deals with them.

Mr. LAUGHLIN. As I understand your testimony, at this stage, the city is planning to develop alternative sources of water, other than just sole reliance upon the Edwards; is that correct?

Mr. WOLFF. We feel that is a strong responsibility of the city of San Antonio. People will differ when you come to a particular project, as they did with Applewhite. All of our polls—whether they were done by the newspapers or whoever, felt that San Antonio needed to have additional water supply from other sources, be it surface water, interbasin transfers, re-use. We intend to develop a plan that the voters will have some confidence that it is the right thing to do.

Mr. LAUGHLIN. Do you feel this bill allows for sufficient cost sharing to blunt the economic impact of the new water supplies that may be required for any one Government involved?

Mr. WOLFF. We think the cost-sharing came out fair. Now, I know that some of the folks down in your area may not totally agree with that because they had to give up some on that in helping financially to develop other water resources for the area. As you know, there was a strong difference of opinion between some of us here and the Guadalupe River Authority, where there were feelings, and not unfounded, I might add, that the great transfer of water resources, with no willingness to participate financially would have been a great windfall for that area and a tremendous economic burden to ours. So, we worked out a cost-sharing that we think is fair.

Mr. LAUGHLIN. Very good. At this time, I will recognize the gentleman from Humble, Congressman Jack Fields.

Mr. FIELDS. I want to point that Congressman Bonilla plans to be here. He had an earlier engagement.

Let me ask, have you had any earlier communication with Secretary Babbitt since the legislature met and passed the legislation and the Governor signed it?

Mr. WOLFF. Yes, we have. In fact, I saw him in Austin, Texas during the signing ceremonies on the Edwards Bill. He was asked to make a few remarks. In his remarks, he made that statement that I gave in my opening statement to the Committee—that he would then go to the Court and recommend that they get out of the Court; but that does not necessarily solve the problems. As you well know, the Judge does not have to listen to that. He is still sitting there with a hammer and we do not know what he is going to do. We are back in his Court. We are going to explain that we have passed this Act and that we think we have done the right thing, and we are going to make our decisions locally, but, under the Endangered Species Act, he does not have to listen to us. He could come along and instruct them to develop another plan of which he initially said to do, which would have been devastating I think to our region.

So, we are not happy. I am not happy with the provision of that Act that allows a District Judge, who does not know a darn thing about the water here, and does not understand the Edwards Aquifer, or downstream interests, or the farmers to the west of us, to tell us what to do. This legislation lets them do that, without taking—and he made that very clear in some of his earlier rulings, that he could not take into consideration human considerations or economic considerations that affect jobs in an area.

Mr. FIELDS. Let me rephrase this another way. Has Secretary Babbitt communicated anything to the Federal Court?

Mr. WOLFF. Not that I know of, unless the lawyers know?

Mr. JOHNSON. No, not to this point.

Mr. WOLFF. Not yet. We were just—the Fifth Court just sent the case back to Bunton's Court. Now, he is going to have that opportunity on what date, counselor?

Mr. JOHNSON. Congressman, the Judge—the District——

Mr. LAUGHLIN. Pardon me. Would you identify yourself for the record?

Mr. JOHNSON. My name is Russell Johnson, Counsel to the city of San Antonio.

Congressman, the District Judge, in response to the Fifth Circuit Ruling, indicated that he intended to conduct further hearings and would review—presumably would review this new Texas legislation. Nothing had been filed with the Court by the Fish and Wildlife Service, post- passage of the State legislation.

Mr. LAUGHLIN. Pardon me. There is an indication that they cannot hear you. You need to move the microphone closer. Thank you.

Mr. FIELDS. So, in essence then, in summary, Secretary Babbitt, to your knowledge, has not communicated anything to the Federal Judge?

Mr. WOLFF. This was said at a public signing ceremony. As far as any Court action, apparently there has not been any yet.

Like I say, what concerns us about the Act is not only what the Secretary of the Interior and the interpretations that they come up with, but it lays on top of it the right of a judge to interpret what

ought to be done. We still do not know what is going to happen in our case. That is still hanging there. We feel that when there is the mechanism—and we were criticized because there was not a mechanism to manage the aquifer—when the mechanism is there, and the will is there to do it, we just think that both the Federal Government and the Federal courts ought to get out of our business.

Mr. FIELDS. Mayor, let me take you back through some of your frustrations because you have shared some of those with me privately. Some of those you shared with the Merchant Marine and Fisheries Committee when you were in Washington. The reason I am asking you to share the frustrations—the purpose of this hearing is to talk about various proposals that are before our Committee, as we go to reauthorize endangered species. There is one proposal that would add immediately to the number of endangered and threatened species, not only in the country, but in Texas. In Texas we would jump from 68 threatened or endangered species to 368 threatened or endangered species.

As I tried to point out in my opening testimony, Congressman Tauzin and I feel that there are some fundamental flaws in the bill. We feel that we can accomplish what should be the fundamental goal of the Endangered Species Act and that is to protect fauna and flora, but to do so in a rational way. As an example, as I remember, one of your frustrations was the ability of San Antonio to be involved early on in the process. Whether it is you representing the City or an individual property owner, a farmer or a rancher, that is now denied under the Endangered Species Act, as it is written. You cannot really look for alternatives.

In your testimony and, for the most part this morning, we talked about the fountain darter. It is important to point out that there were other species involved in this particular issue. I also pointed out this morning that, in looking at our color-coded map, if you talk about the vireo and the warbler, you are not just talking about the $359 million in property value lost in Travis County, you are talking about 41 other counties that are potentially affected by those two particular species. So, I am trying to expand this a little beyond just the fountain darter and what was involved at the Edwards Aquifer.

Mr. WOLFF. I will give you my opinion. I think that Congress has put itself in an untenable situation—not only Congress but, in particular, the Administration, to try to play God to that many different species. Although we would like to think that humans are capable of that, I think the facts are they are not capable of that.

It is my understanding that a hundred new species would be added each year for the next four years, under an agreed Court order again. I do not think there is anybody smart enough anywhere in this whole world to sort out those sort of numbers of species, plus the thousands that are on the list today. I think you are better off—I think you are much better off working with us, at the local level, and State level, to say what can you do with your environment to work with the private sector, to work with yourself to help preserve some habitats or alternative habitats, which is what we are doing with Government Canyon. Then you ought to specifically focus in on a species, determine one particular habitat, and then begin to lay in all of the economic consequences of protecting

that one habitat. I think you need to take into consideration the human and the economic considerations when you designate that endangered species and that habitat. So, we like the thrust of your legislation.

Mr. LAUGHLIN. Mayor, thank you very much for your participation. We appreciate your testimony.

The next panel will be composed of the of the Honorable Rick Perry, Agriculture Commissioner of the State of Texas; the Honorable John Hall, Chairman of the Texas Water Commission; and Mr. Larry McKinney, Director of Resource Protection for the Texas Parks and Wildlife Department.

Now, because of time constraints for this hearing, we have a five-minute rule, where the witnesses will be given five minutes to give their oral testimony. Your prepared statements are made an official part of the record.

At this time, I will note that the testimony of the Texas Farm Credit Bank, presented by Mike Dale, is now made a part of the record. If any others, who are not on the official witness list, have testimony you want made a part of the record, you can bring it up and give it to one of the Committee clerks.

Commissioner Perry, if you will commence with your testimony, we will be happy to listen to you.

STATEMENT OF THE HONORABLE RICK PERRY, AGRICULTURE COMMISSIONER, STATE OF TEXAS; THE HONORABLE JOHN HALL, CHAIRMAN, TEXAS WATER COMMISSION; AND LARRY MCKINNEY, DIRECTOR OF RESOURCE PROTECTION, TEXAS PARKS AND WILDLIFE DEPARTMENT

STATEMENT OF RICK PERRY, AGRICULTURE COMMISSIONER, STATE OF TEXAS

Mr. PERRY. Thank you, Mr. Chairman, and Congressman Fields. I appreciate the opportunity to submit my testimony before you today on a piece of Federal legislation that directly affects the economic well-being of our agricultural community and the private property rights of all Texans.

Rural landowners have always been a vital part of wildlife stewardship equation. Today, under the Endangered Species Act, too often our farmers and ranchers—their private solutions to wildlife preservation are overlooked, and they must bear the devastating economic brunt of this restrictive legislation. As the Endangered Species Act currently stands, there is no distinction between the economics of rural agricultural operations and the economics of industrial development; but there is a vast difference. The difference is that rural landowners cannot pass the cost of complying with the ESA, such as the prohibitive costs of obtaining a permit under Section 10—cannot pass that on to the consumers as a suggested retail price.

Now, this Act does not enlist the help of our agricultural producers, nor does it give our farmers and ranchers the opportunity to work to support the listed species. In fact, in many cases, implementation of the Endangered Species Act, as it applies to rural landowners, is counterproductive to the goals and the desires of the Act. Under the ESA, as it is currently written, the best stewards of

our land are the first ones penalized by the negative nature of this inflexible Act. They are the first ones to lose their management options because their careful management caused rare species to be present in the first place.

I strongly believe there are three areas that must be addressed in the reauthorization of the ESA. First, there must be a balance between the needs of the species and the needs of the people. The U.S. Fish and Wildlife Service continues to tell landowners what they cannot do, instead of telling us what we can do. Second, there must be better and more complete science in the listing of species and the designated of critical habitat. Bad information makes bad laws. Bad science even makes bad laws that much worse. Third, there must be positive incentives and workable procedures to increase the active participation of our rural landowners. We must involve instead of coerce and always respect the private property rights of these rural landowners.

Tax incentives for habitat maintenance and development; inheritance tax reforms that allow families to maintain large, contiguous habitat tracts; or farm program provisions that enhance the compatibility of wildlife and agriculture are positive examples to increase landowner participation. There are better ways to protect endangered species than those employed under the Endangered Species Act as it currently stands.

The reforms I have suggested and the reforms embodied in Congressman Fields' House Bill 1490 will help protect people's rights, livelihoods and their way of life. It will also be a better tool for protecting our nation's priceless natural heritage.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Perry can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, Commissioner.

Chairman Hall, we will proceed with you now.

STATEMENT OF THE HONORABLE JOHN HALL, CHAIRMAN, TEXAS WATER COMMISSION

Mr. HALL. Thank you, Mr. Chairman and Congressman Fields. My name is John Hall. I have the opportunity of serving as Chair of the Texas Water Commission. At that agency, we are responsible for managing——

Mr. LAUGHLIN. You might pull the microphone closer. They cannot hear you.

Mr. HALL. OK. Thank you, sir.

Mr. Chairman, Congressman Fields, I appreciate the opportunity to come before this Committee and share with you my thoughts on how the Endangered Species Act and the Edwards Aquifer issues have played out over the past few years. The Edwards Aquifer crisis has been at the forefront during much of my tenure as Chairman of the Texas Water Commission. Decades before that, it has been festering. Before there was an Endangered Species Act, there was an imperative and urgent need to effectively manage the water supplies embodied in the Edwards Aquifer. The volatile combination of competing diverse South Texas interests, a thirsty, growing population, a finite supply of water, and federally-protect-

ed endangered species, makes this the toughest public policy issue that I have had to deal with. It remains the most important public policy issue in South Texas.

The Edwards is the only source of water for about 1.5 million Texans, including metropolitan San Antonio, and it is the literal wellspring for a diverse and vibrant 800,000 job economy, including agriculturally based Medina and Uvalde Counties. It also has become a subject of an intense court battle that I am sure that each of you is familiar with. The judge in that case found for the plaintiffs and gave the Texas legislature a March 31st deadline for action. Thankfully, because of the strong leadership of the Governor, Governor Bullock, Senator Armbrister, Representative Linebarger and others, the legislature did act and passed first ever legislation which calls for management of the aquifer under the Regional Edwards Aquifer Authority. That legislation, in large part, is based upon a number of recommendations made by the Texas Water Commission, aimed at properly balancing economic, human and ecological needs.

Current pumpage from the Edwards Aquifer is about 540,000 acre feet per year. In the Sierra Club Case, the Judge found that Comal Springs, home of the endangered fountain darter, would flow during a reoccurrence of the drought of the 1950's if pumpage was limited to 225,000 acre feet per year. This presents an obvious problem. A reduction that drastic, as long as the Edwards is the only water supply for much of this region, creates unacceptable risk to public health and safety and could devastate this region's economy. For the next 30 years, until significant additional water supplies are available, the more than 1.5 million Texans that live in this region are just as dependent upon the Edwards as are the endangered species.

The legislation recently passed by the Texas legislature recognizes this fact and set pumping limits which we think are reasonable. Total withdrawal is limited to 450,000 acre feet in the short-term, but within 15 years, would decrease to 400,000 acre feet per year. The legislation calls for intense planning so that additional water supplies, other than the Edwards can be brought on line to meet the significant challenge that is before us. In light of this successful legislation, it is important to point out that the Federal Judge involved in this case has not signed off on it. We, along with the regional interests, hope that the new framework that has been created will satisfy the judge's interpretation of the Endangered Species Act.

If the Court accepts the plan passed by the Texas legislature, as the U.S. Department of Interior has already done so, then the Act will become an example of being used as a tool to properly balance the needs of our citizens, the economy and the ecological resources.

As I close, let me emphasize several points. First, the Edwards Aquifer would need the type of management called for in the recent legislation even without the presence of the Endangered Species Act. Secondly, the Endangered Species Act may have provided an incentive for regional interests to come together for the first time and put in place a framework to ensure effective management of this resource. Three, the legislation that has been passed goes about as far as we can, if we are to properly balance

endangered species, the economy and the needs of our citizens. Further reductions than those called for by the legislation would have the effect of devastating this State's economy.

As you contemplate the reauthorization of the Endangered Species Act, I ask that you would keep in mind that the key issue that I think that we have to deal with is the issue of properly balancing the needs of our citizens, our economy and the endangered species. In addition to that, the Act I believe, as it is currently written, allows for the proper balancing of these important, sometimes competing resources. I think that one of the difficulties we face, in terms of having the Act implemented, is that implementation occurs almost always in a crisis-oriented manner. I believe that this exists because the U.S. Fish and Wildlife has not moved forwarded and provided clear rules or clear guidance on how we can proceed in the future, particularly States and local Government, to ensure that we move forward to protect the species, but consistent with making sure that the needs of our citizens and our economy are protected as well.

Thank you very much.

[The prepared statement of Mr. Hall can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, Mr. Chairman. Before moving on to the next witness, I should say for the benefit of all of the rest of the witnesses, we now have the witness light system on the table. It was not here when we started. It will stay green for the first four minutes. It will turn amber for the one-minute warning. When it turns red, I would ask you to terminate your testimony—close it as smoothly as you desire, and then I will start tapping the gavel if you do not do that.

Mr. McKinney, please proceed. You are the first witness under the green, amber and red light operation.

STATEMENT OF LARRY D. McKINNEY, DIRECTOR OF RESOURCE PROTECTION, TEXAS PARKS AND WILDLIFE DEPARTMENT

Mr. MCKINNEY. With that warning, I will move as quickly as I can, Mr. Chairman.

Mr. Chairman, Congressman Fields, I appreciate the opportunity to testify before you. I want to emphasize only two key points by which the Edwards Aquifer issues illustrate both the value and the weakness of the Endangered Species Act.

One of the key pinnings of the Act has been to focus on species rather than ecosystems. Congress adopted the original Act in 1973, with the stated purpose to provide a means whereby ecosystems upon which endangered species depend, may be conserved. The failure to meet that goal is well exemplified in the Edwards, for biological concerns are focused primarily on five species.

The Fish and Wildlife Service and others, including Parks and Wildlife, to some extent, have been forced to focus on them in assessing spring flows and undertaking biological studies. However, some 24 more other species also found in this ecosystem are candidates for listing as potentially in need of protection and are not being as carefully considered. By ignoring them, do we not just put the problem off to the future? Yes. I think that is likely.

Does it not make more sense to look at the ecosystem as a whole and determine what is needed to maintain its health and function? In doing so, do we not provide for all of the species living there, listed or not? I believe that is the case. It just makes good biological sense to do so. The prior constraints of the Act and its implementation make that very difficult.

Federal funds and focus for studies and management are tied to listed species, and little is available to help the listing of additional species. Adequate funds are not available for State fish and wildlife agencies to assist in meeting this challenge. Essentially no funds or even incentives are available to help private landowners, particularly rural landowners, as Commissioner Perry pointed out, and only a little more is available to assist cities like San Antonio to comply with the Act.

The funding for implementation of the ESA is not adequate to meet the needs it is generated. This may be best illustrated by the fact that the people in Washington, DC spend more money on Dominoes Pizza each year, and the annual salary of the President of Coca-Cola is greater, and that the Federal Government expends more on three miles of Federal highway in the Washington, DC area than it provided for the endangered species program.

The most significant positive impact of the Endangered Species Act in regard to the Edwards' issue, and perhaps its greatest benefit altogether has been to give a warning, the proverbial canary in the coal mine, that we must seriously consider not only issues like water supply and quality, but biodiversity—that we must do so now before our best options are foreclosed, and we must do so holistically.

It is clear that we in Texas have universally failed to address such problems in the past. Some 281 major and historical springs have been identified in existing in Texas. Of the four very largest, only two remain—San Marcos and Comal. Of the 31 large springs, fewer than 17 remain. None of those springs cease flowing from natural causes.

As for the focus on species, rather than ecosystems in the Act, many of the solutions to the Edwards' issue have tended to be myopic in approach. If we continue to treat the issue piece-meal, the results will likely be the same. The Edwards Aquifer is but a part, although a significant and unique part, of a much bigger ecosystem that stretches from the hill country to the coast of Texas. The actions taken to solve one problem, like building surface reservoirs to provide San Antonio with water, affects another part, because reservoirs can adversely affect other endangered species like whooping cranes, and cause severe economic impacts to coastal estuaries' industries.

Recharging the Aquifer from surface rivers diverts that water from aquatic communities and economic benefits in other basins. Augmentation schemes can provide only supplementary and temporary relief, at best. Every action has a ripple effect that, if not considered, will likely defeat the benefit gained. It is easy to realize the consequences of not listening to such warnings, as can be provided by the Endangered Species Act and of failing to balance economic and development in making a health environment.

You only have to look at Eastern Europe, where economic necessity routinely overrode environmental impact. As a result, in Poland, only five percent of the surface water is suitable for human consumption, and 60 percent of its water is so polluted that it cannot even be used for industrial purposes. I do not know how bad water has to be that you cannot use it for industrial purposes, but it must be pretty bad.

In Czechoslovakia, over 4,000 miles of river contain no fish. In the former Soviet Union, 50 million people life in ecologically hazardous areas. To even begin to clean up the environment in Eastern Europe over the next 10 years, the World Bank estimates a cost of $200 billion.

Like it or not, the Endangered Species Act has forced us to confront such issues in Texas. That is to our benefit and the benefit of future Texans.

Mr. Chairman, I appreciate the opportunity to provide these remarks, and I have provided written material as well.

[The prepared statement of Mr. McKinney can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, Mr. McKinney.

Before we proceed with questions, I want to recognize the Honorable Henry Bonilla, Congressman for the 23rd Congressional District, which is not only the largest in Texas, stretching from San Antonio to El Paso, but probably is the largest Congressional District in the United States, except for those States that are completely one Congressional District because they do not have much population. Welcome, Henry. We are pleased for you to join us.

STATEMENT OF THE HONORABLE HENRY BONILLA, A U.S. REPRESENTATIVE FROM TEXAS

Mr. BONILLA. Thank you, Greg. I represent a district larger than 29 States, which is why it is important to have a hearing regarding today's subject. The Texas 23rd congressional district is made up of ranch land, farming communities, and urban areas. The input that we have today is very critical, because the last thing we need in Washington is for decisions to be made by uncaring policy works or by using information that is funnelled up to Washington second hand. What we are hearing today is first-hand and first-rate information. I am excited to be here taking part in this hearing.

Thank you.

Mr. LAUGHLIN. Thank you, Henry. Knowing the size of Henry's district, mine is somewhat smaller, but it is larger than eight of our individual States. So, I always say I represent the largest congressional district in the eastern half of the State. No difference to Henry Bonilla.

Mr. Chairman, when you were testifying about the impact of the Endangered Species Act on being one of the motivating forces to bring about the Edwards Aquifer Authority legislation, it occurred to me to ask you should there be a provision in the endangered species act dealing with water. I mean, we have talked about endangered animals, we have talked about endangered turtles this morning, we have talked about endangered animals this morning. It occurs to me perhaps water, along with people and agriculture in-

terests are endangered. Do you have some opinion as to whether there ought to be some provision in the Endangered Species Act about preserving water or water sources?

Mr. HALL. I think that those types of provisions may already be incorporated under the Clean Water Act to some degree. I think what I would recommend, Mr. Chairman, is this. When you are dealing with trying to comply with the Endangered Species Act and water is the resource at- hand, you could have a catastrophe almost overnight if you have to move forward and comply with the strict provisions of the Act immediately. An example being here in San Antonio and surrounding counties. In order to comply with Judge Bunton's order of reducing pumpage during a drought to about 225,000 acre feet per year, when you consider growth, this region would have to bring on line about 600,000 acre feet of additional water supplies over the next 30 years to comply with that court order. There is no way possible that you could comply with that court order tomorrow if it was insisted that this region were to do that. So, I think that it is important that when you are dealing with water issues, particularly when you are dealing with a sole-source water supply, that we recognize that time is needed to bring on line additional water supplies, which may be needed to comply with the Act.

For example, in Texas today, it costs—it takes about 25 years to complete the construction of a reservoir and have that reservoir brought on line to supply additional water supplies. For this region to comply with the Judge's order, we are talking about the need to construct three or four different reservoirs. So, this region could face some real difficulties if water is not treated kind of in a unique fashion as attempts are made to comply with the Endangered Species Act.

Mr. LAUGHLIN. Mr. Perry, this morning we had a witness testify that perhaps one alternative to having landowners involved in the Endangered Species Act, preserving endangered species was to come up with inducements, one of those being compensation, another perhaps tax relief, and then made the further suggestion that perhaps there were other methods of inducing landowners to be voluntarily involved in preserving habitat and endangered species, and made the suggestion that we have a forum for the agricultural interests and those interests that traditionally are called the environmental interests—to sit down face-to-face and try to resolve some of these problems, pretty much like all of you did here in Texas on the Edwards Aquifer problem.

I wanted to ask you, as the chief state-wide elected official for agriculture interest, if you would foresee that that could be productive in getting these varied interests, and certainly the agriculture interest, in some type of forum to try to find better working solutions to the endangered species problems that many are talking about?

Mr. PERRY. Mr. Chairman, not only do I agree, but that is ongoing today. As a matter of fact, less than two weeks ago, we had the opportunity to have a group of private landowners. We had a group of elected officials. We had the Nature Conservancy, the Audubon Society together at a seminar hosted by the Natural Resources Foundation of Texas in Austin. I think some of those alternatives

were discussed at that particular seminar. We very strongly profess that the way to get agriculture, the way to get the farmers and the ranchers working toward I think the common goal is to make the incentives in the law and not the penalties. So often, it seems to us in agriculture that Washington has just been this old, bad school marm that believes in doing nothing more than paddling and spanking, when it could be a lot better off if there was some caring, some understanding involved in the process. Those of us involved in agriculture—those of us that have been conservationists and environmentalists, long before the term was cool, will be the ones that are making the endangered species available for the future. We will be the ones that are on the frontline of the conservation effort. We will be the ones on the front line of the environmental efforts of the State. I think it is very important for those environmental groups to sit down with agriculture to come up with a common role that Government can play in creating that atmosphere. That atmosphere will be created with what we refer to as free market environmentalism.

Mr. LAUGHLIN. Thank you very much. At this time, I want to recognize the gentleman from Humble, Texas, Mr. Fields.

Mr. FIELDS. Mr. Perry, earlier this morning we had the Texas and Southwestern Cattle Raisers. We had the Texas Farm Bureau. Of course, those particular representatives were there on behalf of specific agricultural constituencies. You are the only person elected to represent all of Texas Agriculture. Since we are trying to perfect a record, getting ready for the debate that will probably occur sometime in 1994 on this legislation, I would like to have just your general thoughts on what endangered species has meant for Texas Agriculture. Could you also take into account that one particular piece of legislation that is being considered would jump the number of listed and threatened species from 68 to 368 in Texas—what kind of effect that would have?

Mr. PERRY. Congressman Fields, let me first say that I think all of agriculture in this State—when I speak of all agriculture, I am sure there may be one or two small groups that do not agree with this statement. I can say that with a great deal of confidence that the vast majority of agriculture in the State of Texas is very very supportive of H.R. 1490. We think that is the proper direction that that piece of legislation needs to be headed.

The idea of arbitrarily going from 68 to 368 endangered species lacks a great deal of common sense in our opinion. It also lacks a great deal of science. I think that is what has been addressed with your piece of legislation, particularly where you are requiring field-tested data to the maximum extent possible, to support any listing decisions. Right now, it appears to too many of us that these listing decisions are not based in science and until science is the rule—until we use science as the decisionmaking process in the Endangered Species Act, we think it will be—it is a flawed law, and it will continue to be a flawed law.

Mr. FIELDS. How would you suggest getting better information?

Mr. PERRY. I think putting together a data collection—right now there is, as far as I know, there is not a good data collecting apparatus in place, whether from the States, whether from the environmental community, whether from the Federal Government. We do

not have in place an apparatus to gather the data to maintain the background—the scientific background for deciding whether or not there are habitat problems or whether there are specific species problems.

Mr. FIELDS. Mr. McKinney, I want to ask you if you agree with that, as I do you, Chairman Hall. I also want to ask you whether or not you support 1490?

Mr. MCKINNEY. Well, on the first part, no, I do not really agree with Commissioner Perry. I think there is a mechanism in place, and that is in our department. We have the resources throughout the State to do that type of thing. One of the problems has been, as I referred to in my testimony though—is that, in order to do so, it takes money and funds to go out and do those studies because we do have a lot of species. We have the framework in the State to accomplish what the Commissioner is talking about. I certainly agree totally with him on his point that we need to do that. Our problem in the past is that we have not had the resources to do it. We have the ability, but not the resources.

Mr. FIELDS. Do you support 1490?

Mr. MCKINNEY. I think there are very good aspects to that bill. I have not looked at it in as detail as I need to. But, there is—it addresses a number of issues that do need to be looked at. I do not disagree with that part of it at all.

Mr. FIELDS. Let me just ask you specifically then, do you support the concept of having—with the city of San Antonio or an individual farmer or rancher involved from the inception in the listing of a species?

Mr. MCKINNEY. I think that one of the most successful working arrangements in dealing with endangered species has been just that. I think that the examples have been cited in a number of cases in Cameron County, in the local situation, where agricultural interests, environmental interests and others that are affected by those regulations sat down to try to come up with a solution. I think that they have done an excellent job. I think that——

Mr. FIELDS. Do you support looking for alternatives, such as, in the case of the fountain darter—you know, we explored this morning with some biologists, you know, why we do not capture some of the fountain darters and breed and propagate those and the other species involved and make them some of the most prolific species on the plant and reintroduce them to that particular environment? Do you support that concept?

Mr. MCKINNEY. I think that is something you should do as an emergency; but I think it misses the point of what the act should be looking at. As I also stated, we ought to be looking at ecosystems. We ought to be looking at the habitat on which those species depend. If we can take care of that, then we do not have to worry about individual species. They will take care of themselves if we provide the habitat. So, as emergencies and back-ups, we ought to look at that, but, it is certainly not the answer and not a solution.

Mr. FIELDS. I do not want to be argumentative with you, but I want to try to understand exactly where you are coming from so that I never represent your position or the position of the State or your department. Because it appears to me that, in looking at some alternatives, let's say that Judge Bunton's ruling stands, he does

not like what the State did, and I cannot remember exactly what the figures are—the Counsel from San Antonio can tell me—but, if I remember correctly, it is somewhere in the neighborhood of $3 billion replacement costs, $9 billion in lost economic wages, 156,000 jobs. Now, in a situation like that, it seems to me that there ought to be some flexibility that Commissioner Perry talked about in the Act, so that we can look for alternatives. That is what I am trying to find out—whether you agree or disagree with it.

Mr. McKINNEY. You are outside the realm of where I think our responsibility is. I can tell you the consequences of not doing something based on data from the biological issues. When you are talking about economics, I think that is what you need to decide. That is exactly what you are there for. Now, from my point of view, as far as to the question of can we just take some darters out of the system and take care of them, well, that might take care of the situation for the species right there in Comal and San Marcos Springs. The springs, even during normal times, provide 30 percent of their water to the Guadalupe River and San Antonio Bay and, during droughts, 70 to 80 percent. So, what happens if we do not solve that problem, on an ecosystem basis, to the San Antonio Bay and estuary and all that depends on it?

My point is that we should not be looking at particularly these little piecemeal things. We have to do that and the Act forces us to do so. We ought to be looking at what it takes to make the ecosystem, as a whole, work and balance those types of things. I do believe in balance. That is—maybe I am not answering your question directly. All I come at it is from that biological perspective. I can tell you what the implications or the results of a particular action would be to supply water with San Antonio and the need to build those reservoirs and what would likely happen; but the decision as to which way to go is really not mine to make I do not think.

Mr. FIELDS. Finally, do you believe in compensation, if someone loses the viable and economic use of their property?

Mr. McKINNEY. Absolutely, sir.

Mr. FIELDS. Mr. Hall, just very quickly. I know my time is expiring.

Mr. HALL. Congressman, I have not had an opportunity to review your legislation in detail; but it is my view that science and technology ought to play as significant of a role as possible in trying to help us resolve the challenges that we face under the Endangered Species Act. I would also add this. The Act, as it is currently written, allows for there to be conscious decisions to be made tc have a species or a group of species to become extinct, if that is necessary to protect our economy and our citizens. I think what is really needed is to flesh out those criteria, those conditions which extinction becomes a viable option. That remains a big gray area, in terms of implementation of the Act.

My experience, in terms of working with the U.S. Fish and Wildlife staff in Washington is that, when you can get beyond those critical types of issues, they are very flexible and they are very reasonable, and it is wonderful to work with them. For example, back last fall, last spring, we had meetings in Washington with officials from U.S. Fish and Wildlife on the legislation that was being considered by the Texas Legislature to manage the Edwards Aquifer,

which I think again properly balances the needs of our citizens and our economy and ecological resources. They expressed early support for the approaches embodied in that legislation. To the extent that those types of issues could have been resolved up front, how could we go about properly balancing those competing needs? I think that it would have been easier for us to bring about a creative resolution of that problem.

Mr. FIELDS. I am glad your experience has been good. I think Commissioner Perry might disagree with each of you to some degree. I am not going to ask him.

Just to share with you one experience I had, and really it was with Fish and Wildlife and with your department. A very important road needed to be cut in our particular area to join two population centers and, through some walk-through, someone said we think that is an abandoned eagle's nest. My family has lived in that area since the 1860's. We have never seen an eagle. We hope there are eagles there. Someone came in and said abandoned eagles nest. That stopped the project for two years. It was never determined whether it was an abandoned eagles nest, and the nest had been abandoned for over two years. Finally, the local property owners, to actually get the road cut through, had to donate additional property as an easement in perpetuity, as if that particular alleged eagle flew back to that one tree, reestablished in that one nest, climbed down out of the nest, and walked to lake Houston. Now, that was not a good experience for me. I did not see a whole lot of flexibility with the people with whom I dealt. I think it is that type of example that is driving change in this country, you know, whether it is the fountain darter, the vireo, the warbler, the red-cockaded woodpecker, the spotted owl in the northwest—people are demanded some reason. People are saying we can preserve species, but we need to do it with some common sense and some rationality. That is why—that was really the genesis of the legislation that Mr. Tauzin and I introduced.

Thank you, Mr. Chairman.

Mr. LAUGHLIN. Thank you.

Next, the gentleman from San Antonio, Mr. Bonilla.

Mr. BONILLA. Thank you. First of all, I would like to say that I am a co-sponsor of 1490 and have been a strong supporter of that bill. As you well know, I recently came from the private sector and have only been in Government for a little over six months. In the last year and a half I have traveled throughout the district. I have met with ranchers, farmers, people in the energy industry, and the people of San Antonio. During my travels, the Endangered Species Act was always a topic of discussion. It was always addressed very specifically. My constituents are the salt of the earth. They look at the land and they want to preserve it. They want to do what is right for the future. They care about future generations. They look at the Endangered Species Act and suddenly a great intrusion has come around the corner that threatens not only the future generations, but their current livelihood.

Chairman, first, let me stop a second to commend you. We have never visited one-on-one, but I have followed your actions. You have a tough job. I commend you for your hard work. In your position you cannot possibly please everyone. I personally would like to

hear your thoughts on whether you think the Endangered Species Act is being point blank misused in this case. The last time I checked water was not a fish, plant, bird, or mammal; but, nonetheless, this is being used to regulate the Endangered Species Act. Areas like San Antonio and other communities, providing they choose to do so, should work on alternative water supplies, for the next century. Should that also be forced under the Endangered Species Act? It is just a question that I am glad I have the opportunity to discuss with you at this time.

Mr. HALL. Congressman, I think that there is always a temptation by some to take a piece of State legislation or a piece of Federal legislation and use it to try to gain our own selfish agenda and fulfill whatever goals they may have. I am absolutely certain that you can find occasions in which the Endangered Species Act has been used improperly to try to advance some cause or some purpose.

I have had one experience with the Endangered Species Act, so that means that I am not an expert about what the Act is and how it is implemented on a day-to-day basis. All I can say is that for that one occasion that I have had to deal with that, after we have gone around some delays and we established a common understanding of what we were trying to achieve, my experience was a positive one. Now, that experience could go sour tomorrow if the Federal Judge, who is involved in the Sierra Club Case determined that pumpage from the Edwards Aquifer has got to be reduced to 225,000 feet overnight.

So, if the Judge were to make that decision and this panel were to have a similar gathering in the future, I would come before you and articulate, in the strongest of terms that that represented a situation when the Act was being used and had been used in such a fashion where public health and safety needs had not been balanced—we had placed a greater emphasis on protecting a set of endangered species than the well-being of our citizens. To the extent the Act is ever used in a unilateral fashion, then that fashion I think is problematic.

I do think that, when you get the right people at the table, I think that there is a need for the States to be involved. There is a need for the local governments to be involved. To the extent we can have those different types of jurisdictions and individuals involved, we can find creative solutions to the problem. It is when the solutions come from Washington already fashioned that we have the difficulties.

Mr. BONILLA. I agree with that, especially the latter part of your statement there wholeheartedly. It is when someone tries to decide something above and beyond what the good people in the communities are trying to work out themselves, that you really get into a problem.

Thank you, Chairman.

Mr. LAUGHLIN. Thank you, Congressman.

I want to thank this panel for your very important input and testimony. We appreciate your help on this matter. Have a good day.

Next we will hear from the panel composed of the Honorable Tom Loeffler, Former Member of Congress; Mr. Bartell Zachry, Chairman of the Economic Development Foundation; David Lang-

ford, Executive Vice President, Texas Wildlife Association; Ms. Angela Beck, Chair, Lower Colorado River Authority; Mr. David Braun, State Director and Vice President, Texas nature Conservancy; and last and certainly not least, Mr. Glenn Longley, member of the San Marcos Recovery Team and Professor of Biology at South West Texas State University.

Welcome, members of the panel and Congressman Loeffler, if you will begin.

Mr. LOEFFLER. Thank you.

Mr. LAUGHLIN. Did I explain the lights? I know you understand them. Did I explain that when we got them up earlier? All right.

Please proceed, Tom.

STATEMENT OF THE HONORABLE TOM LOEFFLER, FORMER MEMBER OF CONGRESS, PARTNER, ARTER & HADDEN; BARTELL ZACHRY, CHAIRMAN, ECONOMIC DEVELOPMENT FOUNDATION, ACCOMPANIED BY: AL MARTINEZ-FONTS, CHAIRMAN, GREATER SAN ANTONIO CHAMBER OF COMMERCE AND JOE M. CULLINAN, CULLINAN AND ASSOCIATES; DAVID LANGFORD, EXECUTIVE VICE PRESIDENT, TEXAS WILDLIFE ASSOCIATION; ANGELA BECK, CHAIR, LOWER COLORADO RIVER AUTHORITY; DAVID BRAUN, STATE DIRECTOR AND VICE PRESIDENT, TEXAS NATURE CONSERVANCY; AND GLENN LONGLEY, MEMBER, SAN MARCOS RECOVERY TEAM AND PROFESSOR OF BIOLOGY AT SOUTHWEST TEXAS STATE UNIVERSITY.

STATEMENT OF HON. TOM LOEFFLER, FORMER MEMBER OF CONGRESS, AND PARTNER, ARTER & HADDEN

Mr. LOEFFLER. Thank you, Mr. Chairman, and Congressman Fields and Congressman. It is my pleasure to be asked by the Merchant Marine and Fisheries Committee to testify. My purpose today is to do what I can to assist in contributing to what I believe is a dire need for greater balance and equity in addressing the given responsibility to protect certain plants and wildlife animals from extinction. I am a citizen of San Antonio and a generational landowner that has a vested interest in the application of the Endangered Species Act.

Obviously, the Edwards Aquifer experience manifests the extreme over-reach of the Endangered Species Act, based upon the biological impact, without consideration to human social or economic impacts, including the private property rights. I believe in fundamental fairness, and I believe that fundamental fairness has been lacking in the application of the Endangered Species Act here in San Antonio.

I would, if I could, Mr. Chairman, and members of the panel, like to address the remainder of my remarks in the direction of H.R. 1490, the Fields-Tauzin Legislation. First of all, I very strongly support the provision which seeks to promote species and habitat protection and enhancement before listing become necessary. As we know, the Bill encourages Government, property owners, conservationists and industries to become active partners in species conservation. I believe that provision is a provision that is vital to the proper address and implementation of a need for good conservation in dealing with species that could ultimately become extinct.

Furthermore, I believe that the provision dealing with owner compensation for property that has been diminished in value is vital, as a result then of the enforcement of the Endangered Species Legislation.

Also, Mr. Chairman, and members of the panel, preventing litigation to allow implementation of a plan agreed to by owners and Government is essential. Certainty and clarity of purpose are vital. Today, as we all know, the Edwards Aquifer, being the case in point, any lawsuit can frustrate such a plan. I do not believe the American People need court flogging. I believe the American people, the people of Texas, the people in our area, the Edward Aquifer region, need to have an opportunity to allow a plan to work. So, Mr. Chairman, and member of the panel, when you look at the implementation of the Endangered Species Act and you consider the proposed legislation being authored by Congressman Fields and Congressman Tauzin, and sponsored by Congressman Bonilla, Chairman Laughlin, and others across the country, I believe that does address that need in a proper and responsible manner.

As I conclude, Mr. Chairman, the Court decision that has been a thorn in the sides of all involved with the Edwards Aquifer, is something that should come after the fact, not before the fact. Let the incentive be not court flogging, but rather the incentive to have property values assessed; if there are diminished property values, let there be compensation. Let there be the driving force, the incentive, based upon a community, a region, to take care of their own needs and not be forced upon by the—what I believe are unfair, fundamentally flawed mandates by the Endangered Species Act.

Thank you, Mr. Chairman, and members of the panel. I look forward to responding to any questions you may have.

[The prepared statement of Mr. Loeffler can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, Congressman.

Next we will hear from Mr. Bartell Zachry.

STATEMENT OF BARTELL ZACHRY, CHAIRMAN, ECONOMIC DEVELOPMENT FOUNDATION

Mr. ZACHRY. Thank you, Mr. Chairman and members of the Committee. My name is Bartell Zachry, I am Chairman of H.B. Zachry & Company, a company headquartered here in San Antonio. I am here today in the capacity of the Chairman of the Economic Development Foundation of San Antonio. We work very closely with the city and with the county, and also with various chambers of commerce within the county. Our role is a responsibility for industrial recruitment of jobs and opportunity for our citizens in this community.

Public and legislative concerns about environmental quality produced the Endangered Species Act; but a sufficient period of time has now elapsed that warrant a reassessment to see the shortcomings of some of its implementation. You are to be commended for coming to San Antonio because of the recent Edwards Aquifer matter and to hear first-hand some of the things that that has imposed.

The Federal District Court's review of this Act illustrates the need for congressional action. Our mayor observed some of the limitations that the Court could still impose on this region. Frankly, it would be disastrous. The importance of the threatened species, or critters, they are often referred to, to the maintenance of our ecosystems was not pertinent, nor were the livelihood and quality of life of millions of people of this region. We remain hopeful, however, that the Federal District Court will dismiss the suit because of the outstanding legislative compromise just crafted by the Texas Legislature.

I would like to highlight just briefly the economic impact to our local community, should pumping limits be imposed. The source of the figures is the affidavit by Ray Perryman, which is already included in the information. I will not review that. What it essentially did was point out that, in the event of a proportional reduction by the users, under the terms of the Court challenge, that there would be a reduction in total spending of 7.5 billion, a reduction in total output of 4.3 billion, a reduction in personal income of 2.5 billion, a reduction in wages and salaries of two billion, a reduction in retail sales of one billion; but, just as importantly, perhaps more so, a permanent loss of over a hundred thousand jobs.

The Economic Development Foundation is currently working with 66 active corporate prospects who must be reassured that the issues of control and costs of water in this region are being resolved. The State legislation has gone a long way to assure businesses that they have or will have a dependable source of water. We remain hopeful that the District Court will agree.

Many of these 66 companies that are referenced are manufacturers. The categories include metal working, industrial machining, computer equipment, electronic equipment and food processing. Water is an important resource in these processes and is a key criteria used in site selection.

Whether the North American Free Trade Agreement is ratified immediately or not, San Antonio's growing partner to the south, Mexico, will be providing tremendous opportunities for business development, including food processing, which is important to this community. Our community is in a much better location to serve Mexican markets, which will need tremendous amounts of foot items. San Antonio has the potential for becoming a processing center for Mexican agricultural products geared for U.S. consumption.

The Foundation urges this Committee to consider amendments which provide a proper balance between animal and plant species, people, jobs, quality of life. A dependable, predictable water supply is essential to this region's economic future. It is our belief that amendments to the Act which provide for the consideration of individuals, communities and their livelihood are essential, to reflect the needs, desires and aspirations of our great nation.

Thank you, Mr. Chairman, for the opportunity to represent the Economic Development Foundation of San Antonio.

[The prepared statement of Mr. Zachry can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, Mr. Zachry.

The next witness is David Langford. Mr. Langford, please proceed.

STATEMENT OF DAVID LANGFORD, EXECUTIVE VICE PRESIDENT, TEXAS WILDLIFE ASSOCIATION

Mr. LANGFORD. Thank you, Mr. Chairman, Congressman Fields, and Congressman Bonilla. My name is David K. Langford. I thank you for allowing me to testify. I am here representing the Texas Wildlife Association. Guess what? Even though we are not from the Government, we are still here to help.

TWA's membership is composed primarily of landowners, educators, biologists and researches, whose main objectives are the conservation and management of wildlife habitat and wildlife resources. Our membership controls millions and millions of acres of this wildlife habitat in Texas. We feel that the stated purpose and the intent of the Endangered Species Act is beyond reproach. However, we are disturbed by the way the Act is currently being irrationally interpreted and senselessly administered, as we have already heard here and in San Marcos today.

My written statements will review most of these concerns, so I will direct my testimony toward two problems not usually addressed. The first area of our dismay centers around misconceptions of the word landowner. We have discovered, in ongoing ESA discussions, that the landowner's point of view is represented only by developer interests. Remember that TWA represents the private owners of millions of acres of wildlife habitat. Furthermore, our landowner members, because of long established traditions and values, have no desire to build apartments, golf courses or shopping malls, or to over-graze, strip mine or dump toxic waste on their land. We want to keep our land as ideal habitat for all species of wildlife and livestock and people. We are not subdividers, we are providers of wildlife habitat. There is big difference between those points of view, and our position has gone unheeded until now.

The second set of doubts surrounding ESA considerations, lie in the absolute lack of any incentives to remain exemplary stewards of our land. Here, again, we are referring to a non-traditional definition of incentives. We do not imply feeding at the Government trough or dipping handfuls of Government pork.

Let me explain what we mean. Suppose our TWA membership fervently desires to manage for endangered species. Their efforts would not be counted, even if they followed a recovery plan to the letter. Assume, for example, that a TWA member in Travis County offers to enter into a contract with the U.S. Fish and Wildlife Service to provide management of his 10,000 acres of prime golden-cheeked warbler habitat to the benefit of the species.

Now, since the Fish and Wildlife Service says 41,000 acres are needed in that county; and remember we are going to provide 10,000 acres—that means only 31,000 now need to be acquired, right? Wrong. Private efforts are not recognized as part of the equation. So, where is the incentive to help if your actions do not count?

By the same token, beneficial private activities are not protected from legal difficulties. If that same TWA member signs an agree-

ment with the Fish and Wildlife Service to manage his land for himself and for endangered species, there is still nothing to protect him from a lawsuit from some group that disagrees with his rotational grazing system, his fencing repairs, or the color of his front gate. So, if my actions do not count toward species recovery and, if my Government will not protect me from outside suits stemming from the fact that I am now in the public eye because of my efforts to follow their recommendations, again, where is the incentive to help?

In conclusion, let me summarize our main concerns. All landowners are not developers. Some want to dedicate their lives and their land to conserving wildlife habitat. Why not accept their help? Why not provide them with some no-cost incentives—no-cost incentives, like counting their efforts and protecting them from the maneuvers of fund-raising entities? We want to help. We can help. We will help, if you will but allow us to do so.

Thank you. I will be happy to answer any questions.

[The prepared statement of Mr. Langford can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, Mr. Langford.

Next will be Ms. Angela Flores Beck from the Lower Colorado River Authority, the Chair of that Authority. Welcome, Angela.

STATEMENT OF ANGELA BECK, CHAIRMAN, LOWER COLORADO RIVER AUTHORITY

Ms. BECK. Thank you, Chairman Laughlin, Committee members Fields and Bonilla. As Congressman Laughlin said, I am Angela Flores Beck, Chair of the Board of Directors of the Lower Colorado River Authority.

Let me begin by saying I appreciate the opportunity to appear before the Subcommittee on Natural Resource and the Environment to testify on the Endangered Species Act. The Act is one of the cornerstones of environmental law. It seeks to protect the biological resources of this country. The Lower Colorado River Authority, or LCRA, is a regional entity, whose mandate is to manage and protect the natural resources of its 10-county district. As such, we support the goals of the Act and have some direct experience that I would like to share with the Committee members today.

The Lower Colorado River Authority is an agency of the State of Texas created in 1934 to provide electricity, flood control and natural resource conservation. We serve over 800,000 customers in 50 counties with electricity, making us the eighth largest utility in the State. The sale of electricity and water provides revenues for electric operations as well as supports our activities in water quality protection, soil conservation and recreation.

One might say that our bifurcated mission as a regional authority presents divergent tensions. On the one hand, we are a utility that must construct and maintain power lines in a large geographic area within which we can find four plants and 23 animals which are on the endangered species list. We have, nevertheless, been proactive in maintaining our goal of no "takes" by including endangered species considerations in planning our projects, which

have included the surveying of our 14,000 acres and 450 miles of transmission lines.

On the other hand, our larger legislative mandate to manage and conserve the soil, water and wildlife within our district creates responsibilities that go beyond strict compliance with the Act. As a result, we have put enormous energy into the development of the Balcones Canyonlands Conservation Plan, BCCP, for Travis County because, in our role as a regional entity, we recognize the benefits of a regional, multi-species approach to the protection of species and ecosystems. Legislative recognition and validation of this approach would place a priority on it and move the Act toward better protection of the ecosystems the Act was designed to preserve. Simplification of the 10(a) permitting process to better mirror the Section Seven process would be helpful.

We at LCRA believe that the benefits of a regional approach go beyond habitat protection. Such an approach would, among other things, allow economic development to proceed, as well as enhance water quality protection, soil conservation and recreational opportunities.

Other suggestions, that from our experience, would strengthen the Act include: Number one. Additional resources for the U.S. Fish and Wildlife Service are needed to clear out the backlog of candidate species and recovery plans. This would allow the Service to focus resources on multi-species regional plans that address not only endangered species, but also those that are not yet listed. Without attending to this backlog, we will not get ahead of the extinction curve.

Second. Better coordination among the Federal, State and local agencies involved in the listing and recovery planning process is needed. Cooperative management agreements, much like that envisioned by the BCCP, are examples of such coordination. Agreements like these could result in conservation measures that serve to prevent the species from becoming listed in the first place. In the BCCP, for instance, the inclusion of the Barton Springs salamander, which is not currently listed, has been discussed.

Last. More involvement by those affected by the recovery planning process would be helpful. The concern most often raised by landowners to those of us out in the field is that information collected on endangered species will harm property values and/or the landowners' ability to use the land as needed. If we are to be successful in our goals of species and ecosystem protection, particularly in Texas, where 95 percent of the land is privately owned, this concern must be addressed. Additional public involvement in this process would help.

I appreciate the opportunity to share LCRA's experiences with you today. We believe the Act and its goals are fundamentally sound. We think that the suggestions made today, if accepted, would improve it. We also want to emphasize that the Act, beyond habitat preservation, carries additional benefits, enhanced water quality protection and recreational opportunities being the most obvious.

Thank you again for your attention. I will be happy to answer any questions at the appropriate time.

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[The prepared statement of Ms. Beck can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, Angela.

Next will be David Braun. David, please proceed.

STATEMENT OF DAVID BRAUN, STATE DIRECTOR AND VICE PRESIDENT, THE NATURE CONSERVANCY OF TEXAS

Mr. BRAUN. Gentlemen, thank you for the opportunity to address you today. My name is David Braun. I am the Vice President of the Nature Conservancy, and State Director of our Texas Chapter, which is based here in San Antonio.

The Nature Conservancy of Texas is a private, science-driven wildlife conservation organization. We are committed to the use of private sector resources to accomplish conservation throughout the State. We have 22,000 members in Texas. We own and manage 45,000 acres of private wildlife refuges at 32 sites. Every one of those has endangered species. We cooperate with 150 private landowners throughout the State who manage about 300,000 acres of land committed to wildlife conservation. Almost every one of those individuals has endangered species habitat on their property. We also cooperate with public agencies, both Federal and State, who are in the resource management business. Through our cooperative agreements with them, we have helped to protect about 300,000 acres of conservation land in the State.

Today, I am addressing you because of our experience with the Balcones Canyonlands Conservation Plan and the Edwards Aquifer. For three and a half years, at the beginning of the Balcones Canyonlands effort, I chaired the Committee that was developing that plan. The Nature Conservancy stepped out of its normal role of land acquisition and management to serve as a mediator and research fellow, and to provide resources for the development of that plan.

While the Nature Conservancy supports the reauthorization of the Act, in the five years that I have been working here in Texas with the Balcones Canyonlands effort and the Edwards Aquifer effort, I have learned, and the Nature Conservancy has learned that there are problems and inequities with the Act and that the Act could be improved when it is reauthorized.

I want to mainly talk to you today about the Edwards Aquifer. Let me first mention a few ways in which habitat conservation plans and other aspects of the Act could be improved to make the Act more workable. First of all, in the five years that I worked on the Balcones Canyonlands Conservation Plan, it became clear that the Act needed to give much more guidance on the development of habitat conservation plans, so that the procedures do not take so long. A plan that we thought could be done in two and a half years, has now taken five and will probably take another several years to be completed. Much of this could have been avoided by clear guidance in the Act and in the supporting regulations.

In addition, upfront money for planning and research could have made the process go much quicker and prevented many of the inequities that private property owners and people interested in economic development have experienced.

The third point. It is clear, after working with the Act that there need to be incentives for private landowners to work under the Act to protect endangered species. Now, there are only disincentives under the Act. There could be much more done to encourage private landowners. In Texas, where 95 percent of the land is privately-owned, the ultimate success of the Act's goals requires that we engage the private landowners in the effort. Finally, the Act should be used to look at much broader systems. Ecosystem-wide concerns can be addressed under the Act. Right now, the implementation is being directed at individual species. This is not an efficient approach.

Now, to switch to the Edwards Aquifer issue for a moment. I first want to cut through some of the rhetoric that has been prevalent in our area. There are too many people trying to say that, with the Edwards Aquifer we have a case of people versus the endangered species, jobs versus animals, and this not really the case. I am here to support the position that, with the Edwards Aquifer, we have a clear case of people versus people—that the allocation of water between competing human interests is what is driving this issue. It is unfortunate that the Endangered Species Act has been called into play as a final resort to protect the private property rights and economic interests of people in San Marcos and in New Braunfels and other parts of the State who depend on the Aquifer, but will lose it first.

We believe that these issues can be resolved on a people-to-people basis, but, we need less rhetoric and more good concerted effort to work together, driven by good science. Let me mention a couple of ways in which good science could improve the implementation of the Act. The Fish and Wildlife Service issued requirements—flow requirements, based on the needs of the species. These are based on best available science, but they do not take into account seasonable changes in the species' needs. The Nature Conservancy is helping to organize and fund additional research that will improve these recommendations and possibly free up more water for economic uses.

The lawsuit targeted flexible withdrawal numbers that can be changed, if additional research is done. We are also seeing an opportunity to provide more water for people, if the additional research can be done.

I see I am out of time. Thank you very much.

[The prepared statement of Mr. Braun can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, David.

Next will be Mr. Glenn Longley. Mr. Longley, please proceed.

STATEMENT OF GLENN LONGLEY, MEMBER, SAN MARCOS RECOVERY TEAM

Mr. LONGLEY. Thank you, Congressman Laughlin, Congressman Fields and Congressman Bonilla. I appreciate the opportunity to have a chance to address this Subcommittee. As we are all aware, in the recent session of the Texas Legislature, we did get legislation passed which does much to establish management of the aquifer and provide a basis for protection of spring flow and, therefore,

the species have been provided protection by the U.S. Endangered Species Act. Had it not been for this act, we would not have management or even the potential for management of this vital resource. Passage of this bill would not have occurred without the treat of Federal Intervention.

Just to mention some other kinds of threats, during January of 1991, a threat to the system involved the drilling and flowing of the largest well in the world. The owner is now requesting a permit from the Texas Water Commission to discharge and therefore flow an average of 55.3 million gallons per day, or slightly more than 62,000 acre feet per year. For perspective, the 1956 recharge to the Edwards Aquifer was 43,700 acre feet. This activity seems to me to illustrate the problem of not having management. Unless groundwater controls are imposed and are enforced in such a manner as to hold the aquifer levels above historical levels, there will be the potential for destruction of unique, highly-diverse groundwater and spring ecosystems by the encroachment of poor-quality water or by de-watering some areas where organisms live. It is in the best interest of the region, environmentally and economically to manage the water resources of the region conjunctively. Companies will not want to locate in an area that does not have an assured supply of good quality water.

It will be in the economic best interest of San Antonio and the rest of the region to look for additional ways to supply water for the region's needs. These ways will include, among other things, conservation, re-use, water markets and alternative sources. The mechanism that provided the necessary stimulus for doing something that was essential for the well-being of the region's future was the presence of the Endangered Species Act.

I am not hesitant to request the continuation of this important Act for the preservation of biodiversity. I would think that if modification is necessary, it should be in the area of inclusion of entire ecosystems in the protective language. Our Government should be bound by an ecological version of the Hippocratic Oath, to take no action that knowingly endangers biodiversity. This responsibility should be no less important than that to public health or national defense. The preservation of species for future generations is beyond the capacity of individuals or powerful private institutions. Biodiversity should be considered an irreplaceable public resource. It is not within our capacity to understand the value of this resource until we better know its extent, and know how it contributes to the fitness or ecological well-being of our natural world.

I would like to also mention that I am also a rancher. I also have a cow-calf operation in West Texas. I grew up on ranches and farms in Central Texas. I also have an appreciation of the land and what many appear to think of as a personal property right—that is the right of capture of water, which has been so much the central issue of this argument over the Edwards Aquifer.

I would like to mention just one thing with regard to the right of capture. Water is a natural resource, just like fish and wildlife are natural resources. None of us have the ability to go and catch all of the fish we want, or go and kill all of the deer we want. The reason for that is that these resources which are benefits to the entire public, are managed for the benefit of the entire public. I am cer-

tainly concerned with loss of rights without compensation, but I am also concerned with the future generations having things around that we enjoy and appreciate so much.

I appreciate the opportunity to make these remarks to the Committee. Our written remarks are more inclusive of other information. Thank you. I will be glad to answer questions.

[The prepared statement of Mr. Longley can be found at the end of the hearing.]

Mr. LAUGHLIN. Thank you, Mr. Longley. That concludes all of the testimony of the witnesses. However, I—Mr. Cullinan, I have the letter—you were invited to accompany General McDermitt, but I understand that you brought a prepared statement, which will be a part of the official record of this hearing. I also understand you expect to testify?

Mr. CULLINAN. Well, I was advised that I would testify. I was advised that I was to be here at this time in order to testify.

Mr. LAUGHLIN. Well, we are not going to send you home disappointed. So, you have got time. You watch this light, and please proceed.

STATEMENT OF JOE CULLINAN, CULLINAN AND ASSOCIATES

Mr. CULLINAN. My name is Joe Cullinan. I am a farm and ranch broker, and am testifying on behalf of the Texas Association of Realtors.

The Endangered Species Act, as currently interpreted and enforced by Federal authorities, has caused, is causing and will continue to cause consternation in the real estate industry, especially in that portion of the industry involved with rural property sales and management. The specter of having a property, an area, or a county designated as "habitat" of endangered species or the designation of a "species" as endangered on any land is enough to effectively diminish the owner's individual property rights, as we have known and recognized those rights since the founding of the nation. The matter is compounded in its gravity when such findings of "species" and "habitat" are based on faulty science, with little or no public notice or opportunity for public input.

What is the effect of such designation on a property owner, a prospective buyer of the property, a lending institution, the community? The property owner finds he no longer has all of the options for full use of his property to build a fence or barn where he chooses, to clear land for cultivation, to chop wood for his fireplace or to arrange adequate working capital for his agricultural endeavor due to diminished property value.

The prospective buyer of land is inhibited due to reduction or restriction of normally enjoyed property rights usually accompanied such land purchased, and either turns away from the land, or offers substantially less than the market value of the land, were the designation not in place.

The lending institutions, as most prudent institutions would, would substantially reduce the amount they would lend on the land, due to the uncertainty of the value of the land were they to acquire it on default.

The community would suffer, due to diminished property value affecting their bonding base, and reduction of taxes obtained from the property, not to mention the financial benefit from the circulation of funds generated by a thriving enterprise in the community.

The Endangered Species Act is being invoked by environmentalists to establish case law throughout the country. We are experiencing such in the case of the Edwards Aquifer and the snail darter, et al. This sequence prompts State legislation or local mandates that are hastily devised and very often based on poor, little or no viable corroborative science.

The real estate industry supports and endorses the spirit and intent of the Endangered Species Act. Our industry objects to the methods by which the Act is implemented and the contorted manner in which the Act is interpreted. This is the only law in which illegally- obtained evidence can be used against a landowner who inadvertently or advertently violates the "taking" provisions of the Act.

The law is broken. The listing of species, subspecies and population segments is ill-defined, unscientific, ambiguous, fraught with loopholes that can be used, and is used by individuals and organizations to further their personal agenda. The current list contains species that can never be saved. The cost of implementing the law as currently interpreted and for the species listed to be protected, is beyond the capacity of the Fish and Wildlife Service, as well as the Department of the Interior and the citizen taxpayer. The financial impact on the community——

Mr. LAUGHLIN. Mr. Cullinan, you need to wrap it up.

Mr. CULLINAN. I am off. I am finished. OK. I appreciate the opportunity.

[The prepared statement of Mr. Cullinan can be found at the end of the hearing.]

Mr. LAUGHLIN. Your statement is an official part of this record, and we thank you for being here.

This Committee is operating under some time constraints, because the Chairman of the Full Committee is expecting all of the staff that has been making this happen today to be I think in California tomorrow to continue these hearings.

Now, Congressman, Loeffler, I want to ask you—you and others from this immediate area have been critical of the Endangered Species Act and the role it played in the Edwards Aquifer problem that has been ongoing here for a number of years. My question to you is do you think there would have been the pressure on all of the parties involved to pass the Edwards Aquifer legislation that just got passed and has now been touted—and I think very properly touted—if there had not been the Endangered Species Act to get everybody in the corral to settle this problem?

Mr. LOEFFLER. Mr. Chairman, your observation is indeed a very sound observation. Obviously, there were competing interests from the west, from the San Antonio area, and from the east, in your area.

The question as to whether the Endangered Species Act is the catalyst that brought people together, I would say to you that more it was an over-reaching of the Federal Court system that brought ultimately the people together in this situation. I believe, however,

that there can be a better incentive, one that does not create turmoil, personal ill-will, one part of a very close regional group of people versus another.

I think that the legislation which you and Congressman Fields and Congressman Bonilla have introduced in Washington creates the incentive in a better way. That is to create an opportunity for diminished values of land to be compensated, to create an opportunity whereby a plan brought together by peoples, both in Government and outside Government to be put into effect, without the fear and intrusion frustrating litigation to allow this to occur. That is incentive. Because, if it does not occur, then you will have a repeat of what we have all experienced in this area of Texas.

So, in theory, I must respond to you that yes, the Endangered Species was the driving force. I believe there can be a better way in which people can come together, based upon the legislation which you, Congressman Fields, Congressman Bonilla and others have introduced.

Mr. LAUGHLIN. Thank you, Congressman. Those are all of the questions I have.

Next, I would yield to the gentleman from Humble, Texas, the Senior Republican on the Merchant Marine and Fisheries Full Committee, Mr. Fields.

Mr. FIELDS. Mr. Laughlin, let me try to follow- up just a moment along that same line of thinking. You and I have had the opportunity to discuss this privately. I think Mr. Braun earlier talked about this really being a divided issue—that, on the one hand, you do have an endangered species issue and, on the other hand, you have got a water issue.

I do think, in regard to the water issue, the Federal Government does not have a role. That is a local, regional or, at best, State issue. On the other hand, you do have an endangered species issue that has to be addressed. Regardless, I mean those things—that has been joined up to this moment, the Federal Judge has not turned loose. Mr. Zachry, in his testimony, has indicated that there has been an effect of the 66 prospects San Antonio is trying to lure.

My question to you—you are a great legislator from this area, a great representative. Now, you are heavily involved in the business community. Just exactly what impact has this had and what should we be looking at? We are trying to perfect our hearing today and our record so that when we go back in 1994 we can pull out what has been stated here today and use that in the debate.

Mr. LOEFFLER. I think, first of all, for those of us as citizens in the Edwards Aquifer area, we have come to realize absolutely that the only alternative to water is water. We better accept that and move ahead as a group of people resolving our own problems than having someone from Washington deliver the postcard saying I am from Washington here to help you.

From the standpoint of what the impact has been in this area of Texas, as an individual, absolutely and directly involved in the legislative process in Austin which, by the way, was a callosal and extraordinary process, there was tremendous ill-will. That ill-will, I believe has now gone away. I believe that all parties had to give. That also, I believe has pulled us together for the challenges ahead.

What about the direct impact on the city of San Antonio? I think, as my colleague and friend, Bartell Zachry, can certainly attest, as chairman of the Economic Development Foundation, there has been a slowdown in opportunities for people in this city. This is something that cannot be overcome? No. We can deal with it. We must deal with it and we will deal with it.

To give you a quantification, Congressman Fields, I am not in a position to do that. Perhaps, however, my friend, Bartell Zachry, might be able to expand a bit further on that.

Mr. ZACHRY. How quickly can I pass that football to somebody else? There is no question about what—I think, as you pointed out, it was a water issue that the other matter produced and yet, at the same time, from an economic development foundation, point of view; but just from good economic development within the city, we need a total quality of life within the city. Clearly, the Endangered Species Act does provide a consideration and a dimension. The problem, for which you all are here, which we are also grateful, is that it in its administration and in the breadth and the consideration of the issue. In that sense, yes, there was some influence. Clearly, for us to have growth within our city for jobs and for the community, to be able to attract others to come into this area, we have got to have something that is reasonably foreseeable, that you can have a reasonable expectation of what is to come. With that kind of sword of democleve there is just no chance of something like that happening. That is what really needs to be addressed.

Mr. LAUGHLIN. Next we will recognize the gentleman from San Antonio, who represents a district larger than 29 of our States, Congressman Bonilla.

Mr. BONILLA. Thank you, Greg.

Mr. Zachry, I was particularly interested in your testimony about the current and short-term problems that limiting pumping from the aquifer would create. Looking at Mr. Loeffler—Congressman Loeffler addressed this—just touched on it briefly—how we would have to adjust in South Texas to pumping limits. Looking into the next century, what would you foresee? Have you thought about looking into whether you would put Texas—what South Texas would look like in the next century, if we were forced to limit pumping like this?

Mr. ZACHRY. I think the way that—rather than to hypothesize what we might have done, with out the passage of the statute by the State of Texas—by this—by satisfying it, that is where I would rather look. With that, that gives an opportunity for the city of San Antonio, as an example, to be able to reinvest in itself. It gives us time to make some things work. It does set a task before us to do something. In that sense, that is—instead of non-controlled growth, it provides appropriate growth within a city. It gives us an opportunity to do things. So, in that sense, we can work as a community within the way that the legislation was passed. If we have something that just imposes with the sort of immediacy that is suggested by a Federal Court, it is an entirely different kind of a story. Granted, I do not feel that it would come on that instantaneous; but, whatever it does would just freeze the kind of development, any expansion, jobs, opportunity until the matter was sorted out,

which would be a very lengthy process. We have a solution in-hand, and a solution will work, if it is given a chance to work.

Mr. BONILLA. Thank you.

Mr. LAUGHLIN. This concludes the testimony and question portion of the hearing. I want to thank all of the panelists for being here. Today we have had a very distinguished group of panelists from the very diverse groups you have heard represented earlier. It is very important that you participate. We thank you all very much. For the audience, thank you for coming. There are cards outside, if you want to fill them out for your comments. We thank you for those. All of you have a good evening. Thank you very much. The hearing is adjourned.

[Whereupon, at 3:30 p.m., the Subcommittee was adjourned, and the following was submitted for the record:

CITY OF SAN ANTONIO

NELSON W. WOLFF
MAYOR

TESTIMONY OF MAYOR NELSON W. WOLFF,
ON BEHALF OF THE
CITY OF SAN ANTONIO
BEFORE THE
COMMITTEE ON MERCHANT MARINE AND FISHERIES
ENVIRONMENT AND NATURAL RESOURCES
SUBCOMMITTEE HEARING
ON THE ENDANGERED SPECIES ACT
U.S. HOUSE OF REPRESENTATIVES
JULY 6, 1993
SAN ANTONIO, TEXAS

TESTIMONY OF MAYOR NELSON W. WOLFF,
ON BEHALF OF THE
CITY OF SAN ANTONIO
BEFORE THE
ENVIRONMENT AND NATURAL RESOURCES SUBCOMMITTEE,
HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE
SAN ANTONIO, TEXAS
JULY 6, 1993

. Mr. Chairman, members of the Committee . . .

. As Mayor of San Antonio, the nation's 9th largest city, I welcome you to our city, and appreciate this opportunity to tell you how the new Texas legislation establishing the Edwards Aquifer Authority will enable us to better manage our natural resources . . . and comply with the intents and purposes of the Endangered Species Act.

. The purpose of this afternoon's hearing is to receive testimony on the implementation of the Endangered Species Act as it applies to our animal and plant species, including the fountain darter, and the Act's impacts on the withdrawal of water from the Edwards Aquifer.

. When I testified on April 1 before your Committee in Washington, D.C., with U.S. Secretary of Interior, Bruce Babbitt, I explained that the Edwards Aquifer is the sole source of drinking water for the city of San Antonio and the cities and residents of eight Texas counties . . . and indeed, it was the FIRST sole source

aquifer designated as such by the U.S. Environmental Protection Agency pursuant to the special provisions of the Safe Drinking Water Act of 1974.

I informed the Committee that Federal Judge Lucius D. Bunton, III had issued a ruling that in order to protect the fountain darter -- an endangered species in Comal Springs -- a level of springflow must be assured to prevent a "taking" of the species. The Texas Water Commission calculated that annual pumpage from the aquifer could not exceed 225,000 acre feet -- a 60 percent reduction in our current pumpage to achieve the requirements established by the court order.

The Judge made his ruling even though the fountain darter, which is like a little minnow, thrives in the hundreds of thousands in San Marcos Springs, which you visited this morning, which has NEVER gone dry in recorded history.

Further, the Judge made his sweeping ruling even though the Texas Water Commission has data that clearly indicates the drought of the 1950s was an extreme event likely occurring only once in a 200- to 300-year time frame.

Keep in mind that the Judge's ruling is not about a NEW project like a dam or a highway . . . Instead, he ruled against an ONGOING, HISTORIC activity dating back more than 100 years.

- Endangered Species CAN survive in more than one designated habitat ... when Comal Springs went dry for five and a half months in the 1950's and the species were lost at that location, fountain darters from San Marcos were reintroduced to Comal Springs - where the number is in excess of 150,000.
- They also survive in large numbers today in San Marcos Springs.
- Fountain darters easily can be collected, maintained and propagated in the laboratory and in refugia.
- Endangered species like the fountain darter can be maintained in refugia, where they can reproduce, to be reintroduced to areas sensitive to drought conditions Indeed, portions of Comal Springs habitat can be preserved during all conditions using augmented flows.
- But the Judge concluded that the Act did not give him the freedom to consider these facts.
- Secretary Babbitt and I both supported at your Washington, D.C. hearing -- regional management of the Edwards Aquifer - - which has now been accomplished through the enactment of the Edward Aquifer Authority legislation.
- During the signing ceremony in Austin on July 11 on the Edwards Aquifer Authority legislation, I was pleased to hear Secretary Babbitt announce that his agency was prepared to go back into federal court and say: "Texas

has taken control of its own destiny, we're ready to pack our bags and get out of the courtroom."

- Secretary Babbitt's decision should carry a lot of weight with Judge Bunton and with the U.S. Court of Appeals for the Fifth Circuit. Unfortunately, the lawsuit is brought by the Sierra Club and those with special interests and is an effort to have this crucial resource managed solely for the benefit of fountain darters at Comal Springs.
- The Judge's decision should be vacated, and the plaintiff's suit dismissed in accordance with an earlier court guidance that parochial special interests should not be allowed to swamp the "ordinary business of life".
- With the millions of dollars all the lawyers have made in the Edwards Aquifer case, we could have quadrupled our purchase of land for habitat . . . The Endangered Species Act has been used effectively to preserve lawyers, who are not an Endangered Species, and not to help preserve the environment through the acquisition of additional land for habitats for endangered species.
- The City of San Antonio, through its water system, earlier this year, agreed to pay one-fourth of the purchase price, 1/2 million dollars, to acquire a 4,800 acre tract of environmentally sensitive land over the Edwards Aquifer Recharge Zone.

- The Department of Interior was asked to participate in the purchase, but they did not have funds for this purpose.
- The City of San Antonio worked hard to insure the passage of the compromise legislation which created the Edwards Aquifer Authority. Under this legislation, the Authority is to develop and implement by June 1, 1995 a comprehensive water management plan that includes conservation, future supply, and demand management plans to preserve this vital resource.
- The Authority, in conjunction with the South Central Texas Water Advisory Committee, the Texas Water Development Board, and underground water conservation districts within the Authority's boundaries, will develop a 20-year plan for meeting the water supply needs of the region.
- All authorizations and rights to withdraw water from the Aquifer under the legislation will be limited to protect the water quality of the Aquifer and the surface streams to which the Aquifer provides springflow; achieve water conservation; maximize the beneficial use of water available from the Aquifer; protect aquatic and wildlife habitat; protect species that are designated as threatened or endangered under applicable federal or state law; and provide for instream uses, bays and estuaries.

- A critical period management plan will be prepared and developed by the Authority by September 1, 1995. The mechanisms in that plan will distinguish between discretionary and nondiscretionary uses; require reductions of all discretionary use to the maximum extent feasible; require utility pricing, to the maximum extent feasible, to limit discretionary use by the customers of water utilities; and require reduction of nondiscretionary use by permitted or contractual uses, to the extent further reductions are necessary according to specified water use preferences.
- In developing the plan, the authority will thoroughly investigate all alternate technologies; mechanisms for providing financial assistance for alternative supplies through the Texas Water Development Board; and perform a cost benefit analysis, and an environmental analysis.
- The authority will complete ongoing research on the technological feasibility of springflow enhancement and yield enhancement, and may research means to augment the springflow, enhance the recharge, and enhance the yield of the Aquifer; monitor and protect water quality; manage water resources, including water conservation, water use and reuse, and drought management measures; and develop alternative supplies of water for users.

- The new legislation provides that the cost of reducing withdrawals or permit retirements must be borne solely by users of the aquifer for reducing withdrawals from the present level to 450,000 acre feet a year, or the alternate amount established by the authority, for the period ending December 31, 2007; and equally by aquifer users and downstream water rights holders for permit retirements from 450,000 to 400,000 acre feet per year, for the period beginning January 1, 2008.
- Other witnesses later this afternoon will explain in greater detail this new legislation. This legislation provides the REGIONAL MANAGEMENT I called for in my prior testimony before your committee . . . to limit pumpage beyond our historic use so that all of us who use the aquifer can have benchmarks established for future water planning . . . and to make optimum use of the aquifer through additional recharge and augmentation of the springs.
- With this new legislation, we in Texas will be working hard to be good responsible citizens . . .to preserve our environment . . . to maximize the beneficial use of water available for withdrawal from the Aquifer . . . protect water quality . . . achieve water conservation . . . and protect endangered species . . . WITHOUT COURT IMPOSED DICTATES.

- As you reauthorize the Endangered Species Act, we ask that you include provisions to assure that regional management plans like the Edwards Aquifer Authority legislation are allowed to work . . . without unreasonable interference from Federal Agencies, Federal District Court actions, or suits by parochial interests.
- The Chairman of your Committee, Representative Studds, has introduced legislation to reauthorize the Endangered Species Act, H.R. 2043, with a new Section 4 for "Recovery Plan Improvements." Under this Section, the Secretary of the Interior, in cooperation with State Agencies, -- would on the basis of the best scientific and commercial data available -- develop and implement recovery plans for endangered species and threatened species to promote the conservation of a species and to seek to minimize adverse social and economic consequences that may result from implementation of recovery plans. Further, in Section 8 of Chairman Studds bill, there are incentives and federal assistance provided for habitat conservation plans.
- Financial incentives to set aside lands for parks and habitats would be very helpful additions to the Endangered Species Act.

- Representative Fields has joined with Representative Tauzin and other members of your Committee to introduce an alternate Endangered Species Act reauthorization bill, H.R. 1490. This bill provides for greater improvements to the recovery planning process in Title II of the bill, and in Title IV for habitat conservation incentive programs. The Fields-Tauzin bill requires the development of alternative strategies for recovery plans, which would include an assessment of the water allocation policy of the State, and the effects on employment that may result from each alternative. Title IV of the bill would provide for the Secretary of the Interior to enter into cooperative management agreements to administer and manage critical habitat areas.
- Representative Fields and Representative Bonilla have also introduced a bill, H.R. 888, to exempt sole source aquifers, like the Edwards Aquifer, from the taking or jeopardy provisions of the Endangered Species Act; and there are other bills pending before your Committee proposing improvements to the Act.
- The City of San Antonio is interested in working with your Committee as you develop Endangered Species Act reauthorization legislation, as we did with the Texas legislature, to enable the federal government to WORK with the States, local governments, and the private

sector to help preserve the environment and to take into consideration ECONOMIC AND HUMAN CONCERNS for an assured water supply and jobs.

. The Edwards Aquifer Authority legislation will allow the region and the City of San Antonio, to be good, responsible citizens and maximize the beneficial use of water available for withdrawal from the Aquifer while protecting water quality and threatened or endangered species.

. We are anxious to preserve our environment, but what we need is for your Committee as you reauthorize the Endangered Species Act to assure that the City of San Antonio and other cities are never again placed in a situation like that under Judge Bunton's interpretation of the Endangered Species Act, that the new Edwards Aquifer Authority legislation is allowed to WORK. . . and that protection of endangered species be accomplished without massive economic disruption.

. Thank you.

TEXAS DEPARTMENT OF AGRICULTURE

RICK PERRY
Commissioner

Testimony
of
Texas Agriculture Commissioner
Rick Perry
July 6, 1993
Subcommittee on Environment
and Natural Resources
Committee on Merchant Marine and Fisheries

Thank you, Mr. Chairman and distinguished members of the committee. I appreciate the opportunity to submit my testimony before you today on a piece of federal legislation that directly affects the economic well-being of our agricultural community and the private property rights of all Texans.

Environmentalists have long proclaimed that the Endangered Species Act is a "wake up call" for America. And you know what -- I agree. It is a "wake up call" all right. But it's a "wake up call" not for our nation's environmental health but for the well-being of our basic freedoms, because it has allowed environmental politics to take over our land, our lives and our livelihoods.

The founding and building of this great nation were based on private property rights, and it is no coincidence that the first landowners in the 13 colonies were called freeholders. And a group of these men, these owners of private property, forged the tenets of democracy in our Constitution.

The Endangered Species Act should be a wake up call for all Americans, because it is the most absolute and inflexible of all federal environmental statutes. The environmental community itself has dubbed ESA the "pit-bull of

environmental legislation" because it controls human activity more than any other law in the nation.

Rural landowners are more widely affected by this control than any other group. They have always been a vital part of the wildlife stewardship equation. In fact, in Texas, rural landowners provide more than 95 percent of all wildlife habitat in the state. But today, under the Endangered Species Act, too often our farmers' and ranchers' private solutions to wildlife preservation are overlooked and they must bear the devastating economic brunt of this restrictive legislation.

As the ESA currently stands, there is no distinction between the economics of rural agricultural operations and the economics of industrial development. But there is a vast difference between these economic activities. Unlike industry, farmers and ranchers have no economically feasible avenue to obtain incidental take permits under section 10 of the ESA.

Farmers and ranchers cannot afford to buy large acreages of wildlife habitat to mitigate their everyday activities such as cutting a right of way for a fence or constructing a pond. Rural landowners cannot pass the costs of complying with the ESA on to consumers at a "suggested retail price." The ESA should provide the flexibility to manage for all wildlife and still produce a livelihood, as Texans have done with game species such as deer and turkeys for decades.

The ESA is telling our landowners that as far as endangered animals are concerned, they have no management options as private property owners.

Even when landowners are "compensated" for their land through purchase by a group like the Nature Conservancy they receive a greatly deflated price, because once a piece of property is considered an endangered species habitat, the value plummets.

Another problem with the act is its ineffectiveness in leading to the recovery of endangered species.

It would stand to reason that it's in the best interests of the ESA's environmental advocates and the endangered species themselves if rural landowners, who own milllons of acres of Texas wildlife habitat, could actively support the ESA. But the act sets up adversarial roles between rural landowners and the federal government.

Excessively broad regulatory definitions of "take," "harm" and "harass" make the landowners adversaries by their mere presence on the land. This is despite that fact that they and the species co-existed compatibly long before these regulations were promulgated.

This legislation must be changed to involve rural landowners in creating solutions instead of coercing or bludgeoning them into compliance. For generations, rural landowners and wildlife have shared a common home on our rural lands, because the survival of both depended on conscientious stewardship. But it is unfair to ask our farmers and ranchers to bear the considerable economic burden of protection alone. Rare plants and animals should be a treasure to our rural landowners instead of a dreaded liability.

And good land management practices have provided viable habitats for many of our endangered species. But for some reason, individuals who don't know any better think that those species are there not because of, but in spite of, the landowner.

For some reason, no one considers that those species might prosper better under private stewardship rather than federal bureaucrats. Along the Gulf coast of Texas, for example, the largest population of federally listed Attwater's Prairie chickens occurs not on federal refuges but on private ranch lands.

Good stewardship and judicious use of our natural resources make good sense for both farmers and ranchers and wildlife. No one loves the land more than a farmer or rancher. Most of us come from generations of producers and many of us want our children to follow in our footsteps.

In order for our children to step into our shoes, we must keep the land and our production practices environmentally healthy and economically sound.

Mr. Chairman, land is a farmer's capital, and today's producers don't destroy capital. They are not suicidal and, believe me, they are not stupid. You can't tell me these are people who are going to deplete their natural resources and destroy their way of life.

But under the ESA, the best stewards of our land are the first ones penalized by the negative nature of this inflexible act. They are the first ones to lose their management options because their careful management caused rare species to be present in the first place!

This act does not enlist the help of our agricultural producers, nor does it give our farmers and ranchers the opportunity to work to support the listed species. In fact, in many cases implementation of the ESA as it applies to rural landowners is counter productive to the goals and desires of the act.

When the conscientious landowner is penalized for doing a good job of managing habitat and maintaining valuable resources, maybe it's time for Washington to change its way of thinking -- and its approach to endangered species conservation.

We should be more concerned about reinforcing the natural relationship between rural landowners, wildlife and habitat instead of creating false and unnecessary conflict to the detriment of all.

I strongly believe there are three areas that must be addressed in the re-authorization of the ESA. First, there must be a balance between the needs of the

species and the needs of the people. Ranchers in the Texas Edwards Plateau as well as state and federal natural resource agency personnel are extremely frustrated by the inability of the U.S. Fish and Wildlife Service to provide answers they need for compatible management options that will serve the needs of both producers and vireos and warblers. The Fish and Wildlife Service continues to tell landowners what they "can't do" instead of what they "can do."

Second, there must be better and more complete science in the listing of species and the designation of critical habitat. Bad information makes bad laws and bad science makes bad laws even worse.

And third, there must be positive incentives and workable procedures to increase the active participation of our rural landowners, the owners of much of the nation's wildlife habitat. We must involve instead of coerce and always respect the private property rights of these rural landowners. Tax incentives for habitat maintenance and development, inheritance tax reforms that allow families to maintain large contiguous habitat tracts, or farm program provisions that enhance the compatibility of wildlife and agriculture are positive examples to increase landowner participation.

In addition, workable procedures need to be in place to provide assistance to landowners to ensure practical implementation of the act at the local level. These would allow the rural landowner to function and still protect the endangered species on his or her land. At present, there is no effort by the Fish and Wildlife Service to coordinate their activities with experienced resource personnel in the field, such as U.S. Soil Conservation Service or state Extension Services to provide viable management options to farmers and ranchers who have endangered species on their land.

Ladies and gentlemen, the ESA may be the "pit bull" of our environmental laws. But unrestricted pit bulls cause harm and destruction.

It's time to put a leash on the ESA.

There are better ways to protect endangered species than those employed under the ESA as it currently stands. The reforms I have suggested will help protect peoples' rights, livelihoods and way of life, and will also be a better tool for protecting our nation's priceless natural heritage.

Thank you.

Testimony of Texas Water Commission Chairman John Hall before the House Subcommittee on Environment and Natural Resources, Committee on Merchant Marine and Fisheries, San Antonio, Texas, July 6, 1993

■ Thank you Mr. Chairman, and members of this committee for allowing me the opportunity to come here and share my thoughts with you about the Endangered Species Act and the Edwards Aquifer.

■ The Edwards Aquifer crisis has been at the forefront during much of my time as chairman of the Texas Water Commission. But for decades before that, it has been festering.

■ Before there was an Endangered Species Act, there was a need to manage the Edwards Aquifer.

■ The volatile combination of competing, diverse South Texas interests, a thirsty growing population, a finite supply of water - and federally-protected endangered species - makes this the toughest public policy issue I have dealt with.

■ And it remains the most important public-policy issue in South Texas.

■ The Edwards is the only source of water for about 1.5 million citizens including metropolitan San Antonio, and it is the literal wellspring for a diverse and vibrant 800,000-job economy including agriculture-based Medina and Uvalde counties.

■ It also became the subject of a court battle I'm sure you are all familiar with, as the Sierra Club sued the U.S. Fish and Wildlife Service claiming that federal agency had violated the ESA by failing to regulate withdrawals from the Edwards.

■ The judge in that case found for the plaintiffs and gave the Texas Legislature a May 31 deadline for action.

■ Thankfully, the Legislature acted and passed first-ever legislation which calls for management of the aquifer under the regional Edwards Aquifer Authority.

■ That legislation in large part is based on a Texas Water Commission plan that calls for the <u>balancing</u> of economic interests and endangered species.

■ Current pumping from the Edwards is about 540,000 acre-feet per year.

■ In the Sierra Club case, the judge found that Comal Springs - home to the endangered fountain darter you have already heard about - would flow during a repeat of the 1950s drought only if annual pumping were limited to 225,000 acre-feet.

■ This presents an obvious problem. A reduction that drastic, as long as the Edwards is the only water supply for much of this region, creates unacceptable risks to public health and safety and could devastate this region's economy.

■ And for the next 30 years, until significant additional water supplies are available, more than 1.5 million Texans who rely on the Edwards for sustenance and livelihood will be <u>at least</u> as dependent on it as are the species.

■ The legislation recognizes this, and sets pumping limits which we think are reasonable.

■ Total withdrawals are capped at 450,000 acre-feet per year in the short term, and within 15 years decrease to 400,000 acre-feet per year.

■ The legislation calls for intense planning so that the region can finally begin to turn to non-Edwards sources as a supplement.

■ In light of this successful legislation, however, it is important to point out that U.S. District Judge Lucius Bunton, who heard the ESA Sierra Club case, has not signed off on it.

■ We, along with the regional interests, hope the new framework that has been created will satisfy the judge's interpretation of ESA requirements.

■ If the court accepts the plan - as the U.S. Interior Department as enforcer of the ESA has already - then it is an example of the ESA being used in a balanced approach which will give the region water certainty and will encourage San Antonio enough finally to develop additional water supplies.

■ I want to be clear on several points:

■ One: the Edwards Aquifer would need this type of management with or without the ESA.

■ Two: however, it took the ESA and the threat of intervention to force the parties to reach a legislative solution to this crisis.

■ Three: The legislation, based on the TWC plan, goes about as far as we can go to try and preserve the species without undue economic harm to this vast region.

■ As you contemplate the reauthorization of the Endangered Species Act, please keep in mind that I feel that the key is <u>balance</u> between the needs of the species and the needs of our citizens.

■ Thank you very much.

TEXAS WATER COMMISSION RECOMMENDATIONS:

THE EDWARDS AQUIFER

MARCH 1, 1993

Introduction

The Edwards Aquifer (Balcones Fault Zone) is a unique groundwater formation underlying all or part of eight counties in South Central Texas: Kinney, Uvalde, Medina, Atascosa, Bexar, Guadalupe, Comal, and Hays. It is the only source of water for about 1.5 million citizens including metropolitan San Antonio, and it is the literal wellspring for a diverse and vibrant 800,000-job economy including agriculture-based Medina and Uvalde counties.

The Edwards Aquifer also supports economies downstream of two springs it feeds: Comal Springs at New Braunfels and San Marcos Springs, both home to federally-listed species at the core of the Court's ruling. Springflow forms much of the base flow of the Guadalupe River at Victoria, and supports up to 80,000 jobs in that river basin all the way to the Gulf Coast. Flows from the Guadalupe River also contribute to the health of the state's economically and ecologically important bays and estuaries.

The "balance" of the aquifer - the difference between the amount taken out by pumping and springflow compared to recharge by rainfall - is at a critical point. The Edwards Aquifer is imperiled by long-term mining, which threatens the continuous flow of Comal Springs and San Marcos Springs. There are also potentially severe water quality and water supply problems for citizens reliant on the Edwards if overdrafting remains unchecked. It must be managed properly.

Requirements and Findings of the Court

The Court has ordered the TWC to submit a plan which, in its best professional judgment, assures that Comal Springs and San Marcos Springs will not drop below "jeopardy" levels as defined by the U.S. Fish and Wildlife Service (USFWS), even in the repeat of the record drought of the 1950's. The judgment establishes "interim springflow findings" providing that "jeopardy" occurs at Comal Springs "somewhere above 0 cfs." The judgment also directs USFWS by March 16, 1993, to determine jeopardy levels "based on available information and in the exercise of its best professional judgment."

The Court's findings provide that, in the USFWS's best professional judgment as reflected in its March 26, 1992 letter to TWC, jeopardy occurs above 0 cfs at Comal Springs. (Finding 89) This same opinion was reflected in a letter to the TWC dated Aug. 19, 1992. (PX 35). The Court also finds that the USFWS is "free to conduct, or request others to conduct, such specific studies as it wishes, on such schedules as it wishes, and to modify its judgments if, as, and when those studies generate different information." (Finding 86) Thus, the Court recognizes that "jeopardy" under the Endangered Species Act is a malleable concept, dependent on expanding knowledge of the biological requirements of species and creative strategies for meeting those requirements. The Court determined that protection of continuous springflow at Comal Springs will ensure a higher level of continuous springflow for the San Marcos Springs (Findings 31, 32, and 33).

Current pumping from the Edwards Aquifer is approximately 540,000 acre-feet per year (Finding 34). The Court finds that annual pumping cannot exceed 225,000 acre-feet in order to provide continuous flows at Comal Springs during a repeat of the 1950s drought (Findings 199, 202). A reduction that drastic, as long as the Edwards is the only water supply for much of this region, creates unacceptable risks to public health and safety and could devastate this region's economy.

In its findings, the Court recognized that the droughts of 1984, 1989, and 1990 are "once in a decade" droughts, i.e., droughts that are expected to recur on a fairly regular basis. (Findings 38 and 214). The Court also found that it is the probable repeat of *these* droughts, rather than the highly unlikely repeat of the 1950s drought, which represents the most immediate threat to the species (Findings 35, 36, 37, 96, 104, 105, 106, 155, 165, and 214).

The severe, extended 1950s drought was unique in recorded Texas history. Available data clearly indicates that it was an extreme, 200 to 300-year event. Its intensity, duration, and impact exceeded any other drought believed to have occurred in the state. The drought of the Dust Bowl era of the 1930s, while the greatest climate-related disaster in American history, was not as intense or prolonged in Texas as the "super" drought of the 1950s.

72-118 O - 93 - 3

Because a repeat of the 1950s drought is extremely unlikely during the next 30 years based on available data, adequate springflow can be maintained for this interim period using pumping limitations based upon the repeat of the so-called "decade" droughts. The USFWS letter dated August 19, 1992, commenting on TWC proposed Edwards Aquifer management rules agreed, stating: "Taking into consideration the amount of water now present in the aquifer, the TWC's hydrologic simulations, as well as our hydrologist's evaluation of droughts in the region, we believe for the next 20 plus years there is a high probability of uninterrupted flow at San Marcos and Comal Springs if your proposed plan, subject to our recommended changes, is implemented." (PX 35).

The Court recognizes that it will take a significant amount of time to develop additional water supplies to offset reductions in pumping and meet future water demands (Finding 205). The Court also indicates that if reductions cannot be made in time to protect the species during a repeat of the 1950s drought, exemptions from the Endangered Species Act are available (Findings 78, 79, 162, and 190). Specifically, the Court found that if the region experiences a "major" drought, and if "severe economic harm" were inevitable to satisfy springflow-related requirements under the Endangered Species Act, then exemptions from those requirements may be pursued to allow "takings," destruction of critical habitat, "jeopardy," and even extinction of species during a crisis, pursuant to §§10(a) and 7(h) of the Act (Finding 208).

Finally, the Court found that a contingency plan to rescue the endangered species population by placing them in refugia (aquariums) could be a necessary emergency tool if recovery measures cannot be completed in time. (Finding 144.)

TWC Recommendations to Manage the Edwards Aquifer

For the next 30 years, until significant additional water supplies are available, more than 1.5 million Texans who rely on the Edwards Aquifer for sustenance and livelihood will be at least as dependent on the resource as are the species. In the TWC's best professional judgment, continued reliance on a 350,000 acre-feet annual rate of pumping *during periodic drought* is absolutely necessary to protect public health and safety until additional water supplies are developed. Consequently, an immediate reduction of pumping below that amount likely would create chaos for the region's population, unacceptable health and public safety risks as well as an unprecedented economic crisis.

TWC research indicates that the 1950s drought is at least a 200 to 300-year event, therefore unlikely to recur during the next 30 years. As the Court notes, the most immediate threats to the species are the sporadic, milder "decade" droughts which nevertheless can draw water levels down quickly in this aquifer.

Significant additional water supplies must be brought on line over the next 30 years, both to protect the endangered species and promote public health and safety. TWC recommendations fall in three broad categories: Short-term (Next 15 years); Intermediate (2008-2023); and Long-term (Later than 2023).

The TWC submits recommendations which, in its best professional judgment, set maximum reductions in pumping which can be achieved in the immediate and long terms without causing severe economic harm to the region and risks to public health and safety. The recommendations provide immediate protection of the species against droughts likely to recur during this interim period, and provide protection for continuous flow at San Marcos Springs even if a catastrophic drought recurred in the short term. The TWC also recommends development within 30 years of additional water supplies using realistic time frames that would allow for enhanced and/or complete protection of continuous springflows at Comal Springs. The TWC believes these recommendations are consistent with the Court's findings regarding the incidental take permit and exemptions.

A. Short-term Component (1993-2008) Objective: Continuous flow of Comal Springs during any reasonably anticipated conditions. Continuous flow of San Marcos Springs.

1) Legislation to Create a Management Entity. This is the basis of a successful Edwards Aquifer management strategy. The TWC recommends that the Texas Legislature create a local/regional entity *with the necessary authority* to implement and enforce an aquifer management plan during the current legislative session. The management entity also must be capable of initiating application for and obtaining permits or other relief pursuant to the Endangered Species Act.

2) TWC Recommends a Pumping Reduction to 450,000 Acre-feet/Year. The regional management entity must put restrictions into place to reduce annual pumping to 450,000 acre-feet yearly. This reduction of approximately 100,000 acre-feet per year from current pumping can be achieved primarily through municipal and agricultural water conservation required by the management entity and local governments. Stepped-up reuse efforts, and intense public education by water utilities and districts in the region will also be necessary. This goal can be achieved. For example, the TWC and Texas Water Development Board (TWDB) have assessed Edwards Aquifer uses and estimated reasonable water conservation potential in the next 10-15 years for the municipal, industrial, and agricultural sectors. The "reasonable" potential is that which is both technically and economically feasible and which can be implemented without severe economic disruption. The range of achievable water savings for municipal and industrial use is estimated at 49,000 to 73,000 acre-feet per year. For irrigated agriculture using Edwards water, the savings are estimated at 40,000 to 52,000 acre-feet per year. Overall, this represents an available, near-term water supply of 89,000 to 125,000 acre-feet per year, or an overall reduction of 16 to 23 percent from the current estimated water use of 540,000 acre-feet per year.

Those savings will allow the reduction to annual pumping of 450,000 acre-feet called for in these recommendations without severely disrupting the lives of 1.5 million Texans and the regional economy - while at the same time providing significant increased protection for endangered species.

3) TWC Recommends the Allocation of Available Water. The regional management entity should as soon as possible establish a definitive regulatory system for the withdrawal and use of water from the Edwards Aquifer. This system - similar to the way surface water is allocated in this state - should include the equitable allocation of available water based upon historical use, conservation potential, and the amount available for withdrawal. This system should create a first-ever "market" for Edwards water. That market, which will need refinement as it develops, will make possible the ongoing purchase/sale and "retirement" of Edwards rights.

4) TWC Recommends Application for a §10(a) "Incidental Take" Permit. The management entity should apply for and obtain a §10(a) "incidental take" permit from the USFWS to allow "takings" of some species during a 20-30 year time frame until enough additional water supplies can be developed to reduce aquifer withdrawals and to promote continuous springflow at all times.

5) TWC Recommends Planning Efforts. It is imperative that planning efforts be launched or accelerated immediately in these areas: diversions below the springs, interbasin transfers, additional recharge, springflow augmentation, and new surface water development. The development of these additional water supplies will take significant

effort and expense as well as unprecedented cooperation among affected groups and entities. For example, the average time to plan, obtain necessary permits, and complete construction of a reservoir in Texas is 25 to 30 years. It may take longer due to probable legal challenges.

EMERGENCY DROUGHT MANAGEMENT PLAN

The TWC recommends that a critical feature of the short-term strategy will be a highly effective drought management plan. The plan - designed to protect continuous springflows during "decade" droughts - will reduce withdrawals to 350,000 acre-feet when drought conditions occur. Management measures will be implemented when aquifer levels drop below 649 mean sea level as measured at index well J-17 in Bexar County. According to this plan:

a. Users will be required to implement use-reduction plans as the aquifer level falls below 649 msl providing for:

   i. restriction or curtailment of non-essential uses; and

   ii. lease or temporary retirement of withdrawal rights;

b. The management entity will begin consultations with USFWS when the aquifer level falls to 649 msl to determine additional plans that could be feasibly implemented.

c. The 350,000 acre-feet/year rate will be achieved by the time the aquifer level reaches 625 msl;

d. In consultation with the USFWS and the Texas Parks & Wildlife Department (TPWD), the entity will prepare and implement a plan to minimize and mitigate any "takings" that may occur. This plan should include reasonable and prudent measures such as temporary removal of endangered species to refugia and other feasible alternatives.

e. If aquifer levels continue to fall and additional reductions are not possible, the entity in conjunction with the Governor of Texas, USFWS, and/or other federal action agencies will apply for an exemption pursuant to Section 7(h) of the Endangered Species Act.

B. Intermediate Component (2008-2023) Objective: Same As "A," *plus* additional movement away from total reliance on pumping and transition to alternative supplies. The Emergency Drought Management Plan will be implemented as necessary.

The TWC Recommends a reduction to 400,000 acre-feet in the total annual amount of water withdrawn from the Edwards by Dec. 31, 2008. This can be achieved through the following strategies:

1) **Continue to Enhance Water Conservation, Reuse, and Recycling.** Innovative strategies and technologies should be implemented to enhance water conservation, reuse, and recycling, such as providing financial assistance to the agricultural sector for acquisition of state-of-the art irrigation systems.

2) **Purchase and Retire Aquifer Withdrawal Rights.** As stated earlier, reductions in pumping should be achieved through a market of Edwards Aquifer water rights expected to follow an allocation system. Regulatory policies should take full advantage of prices, defined pumping rights, and profit motivation to conserve and manage water available for withdrawal. Any market approach demands clearly-defined water rights, which can be achieved by issuance of permits containing specific allocated amounts.

3) **Springflow Augmentation.** It has been suggested that minimum flows at Comal Springs could be permanently guaranteed by a creative augmentation strategy. According to this theory, water could be taken from another part of the aquifer and somehow "delivered" to Comal Springs to protect springflow and the species dependent on it. The theory is untested but is being explored by the Texas Water Development Board and the Edwards Underground Water District. A principal concern is that artificial augmentation, while protecting downstream water users, may not protect the habitat of endangered species and could damage that habitat. Another concern is that a policy of deliberately mining the Edwards Aquifer could lead to deterioration of water quality due to intrusion of poor quality groundwater along the so-called "bad water line".

4) **Continue Aggressive Long-Term Water Development Plan.** The development of additional water supplies for the Edwards region over the next 30 years is critical. The population of the San Antonio area alone is projected to double by the year 2040. Projected water demands for the region will accordingly grow during that period. And the imperiled species, of course, require protection. Thorough planning should be *ongoing* for development of water supplies during this intermediate period. For example, it may be possible to acquire water supplies from existing sources that are close to the San Antonio area. Such sources may include Canyon Lake in Comal County. Water from the Medina Reservoir on the Medina River (and in the Edwards recharge zone) also may be available. Other possibilities include the Carrizo-Wilcox Aquifer south of San Antonio.

5) **Additional Recharge.** Water may be available in the Upper Nueces River basin, and possibly other basins, for projects to boost aquifer recharge. Studies focused on that basin are under way, sponsored by the Edwards Underground Water District. The state

Legislature can require that future appropriations from streams be limited to protect aquifer levels. The TWC recommends that the Legislature consider this option.

6) **TransTexas.** The state-sponsored TransTexas Water Program is under way. It is an examination of available water supplies that could be provided to the Edwards region, including the possible interbasin transfer of water to the San Antonio region and the construction of new surface reservoirs. These recommendations will be outlined in the 1994 State Water Plan and may be presented to the Legislature in 1995 for consideration.

7) **Diversion of Edwards Water Downstream of Springs and Interbasin Transfer.** Water left in the Edwards Aquifer to provide continuous springflow may be diverted downstream of the springs and then transferred to the San Antonio area. Interbasin transfers also should be studied in conjunction with this possible diversion.

C. Long-term Component (2023 and beyond) **Objective: Completion of aggressive plan to ensure compliance with then-current jeopardy determinations even in a repeat of the drought of record, and potential elimination of the necessity for a continued incidental take permit.**

Here is the challenge: The Court has found that in order to provide continuous flow at Comal Springs during a repeat of the drought of record, annual pumping from the Edwards would need to be reduced to 200,000 to 225,000 acre-feet. It will take up to 30 years to complete various water-related projects to bring on line the huge quantities of water necessary to comply with this finding. It is estimated that the population in the metropolitan San Antonio area will double by the year 2040, with concurrent economic growth.

Even with aggressive conservation, the TWC estimates that projected demands for the year 2040 will be more than 700,000 acre-feet per year. So in order to comply with the Court's interim "jeopardy" finding regarding Comal Springs, approximately 480,000 acre-feet of water supplies will have to be added. Available data *which needs significant refinement* generally indicate that these supply types could be available through a very aggressive water management effort for the Edwards Aquifer region:

- Interbasin transfers and water diversions below springs: 150,000 acre-feet.
- Existing reservoirs or groundwater from other than Edwards: 60,000 acre-feet.
- Reuse: 100,000 acre-feet.
- New surface water projects: 270,000 acre-feet. The Texas Water Development Board has identified several new reservoir projects for the Edwards region, including the Applewhite Reservoir in Bexar County, Cuero, Lindenau and Goliad. Required feasibility

studies, applications for state and federal permits, and defense of likely litigation have not occurred and will impact the time frame for implementation.

The types of supplies described above could bring the region an additional 580,000 acre-feet over the next 30 years. Development of such immense quantities of additional water supplies will require a massive undertaking unparalleled in the region's history, and perhaps in the history of the State of Texas. Successful completion of these projects will permit pumping from the aquifer to be reduced to 200,000 to 225,000 acre-feet annually during dry periods, if required by then-current Endangered Species Act determinations.

SUMMARY: TWC RECOMMENDATIONS

1) **SHORT-TERM (1993-2008)** The TWC recommends the creation by the Legislature of a strong local/regional management entity, reduction in annual pumping to 450,000 acre-feet by conservation/reuse, establishment of a water rights allocation system, application for incidental take permit, immediate launching of long-term planning, and establishment of an emergency drought management plan. *Additional water supplies should be developed during this period.*

2) **INTERMEDIATE (2008-2023)** The TWC recommends additional reduction to 400,000 acre-feet annual pumping, refinement of water rights market, acquisition of available water supplies, continued long-term planning, and development of additional water supplies.

3) **LONG-TERM (2023 AND LATER)** The TWC recommends complete implementation of all projects necessary add sufficient additional water supplies for the region in order to provide the highest level of protection for springflows, protect public health and safety, and avoid disruption of the regional economy.

An in-depth review of similar TWC recommendations was conducted by USFWS in August 1992. By that time, USFWS had already determined that "jeopardy" at Comal Springs occurs above 0 cfs. That federal agency, which is responsible for ensuring compliance with the Endangered Species Act, determined that with certain minor modifications, the TWC plan "could increase protection and assurances of flows at San Marcos and Comal Springs, and therefore could provide a sound basis for resolving endangered species issues." In the TWC's best professional judgment, this plan not only is a sound basis for resolving endangered species issues, but also provides a foundation for resolving the region's long-term water needs without unnecessary risks to public health and safety and severe regional economic disruption.

TESTIMONY BEFORE THE SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES ON THE IMPLICATIONS OF THE ENDANGERED SPECIES ACT REGARDING THE EDWARDS AQUIFER

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INTRODUCTION

In 1973 the United States Congress adopted the Endangered Species Act (ESA) with a statement that its purposes are "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section." [16 U.S.C. §1531(b)]. The ESA has often been described as progressive and foresightful for recognizing that the conservation of species is intricately connected to the conservation of ecosystems.

Rarely has the connection of the plight of endangered and threatened species to the natural and human ecosystem been so readily apparent as in the case of the Texas species dependent upon the Edwards Aquifer. Consequently, the Edwards Aquifer case has pointed to the need to address conservation concerns across several ecosystems from the aquifer to the Gulf of Mexico. Five federally-listed plant and animal species are directly dependent upon the Edwards Aquifer (Table 1 and attachments). One, the endangered Texas Blind Salamander (*Typhlomolge rathbuni*), is restricted to subterranean habitats within the San Marcos pool of the aquifer. The other four species are associated with the spring-flow of the aquifer into the San Marcos and Comal Rivers. The San Marcos Salamander (*Eurycea nana*), listed as threatened, is found only in the upper reaches of the San Marcos River in and just downstream of Spring Lake. Texas wild-rice (*Zizania texana*), an endangered plant species, is found only in the upper 5.0 kilometers of the San Marcos River. The Fountain Darter (*Etheostoma fonticola*), listed as endangered is found only in the Comal River and the upper 5.0 kilometers of the San Marcos River. The San Marcos Gambusia (*Gambusia georgei*), listed as endangered, is known only from a small segment of the San Marcos River. Recent surveys indicate that this species may already be extinct. Each of these species exist only in the aquifer or these two spring systems and are primarily threatened by the endangerment of their aquatic habitat. Similar threats exist to spring flows throughout the state of Texas and specifically in the Edwards Plateau region of Texas.

THREATS TO SPRING SYSTEMS OF THE EDWARDS AQUIFER

Within Texas, there are thousands of springs (Brune, 1981) and an estimated 3,500 streams with over 128,000 km of streambed (Edwards et al., 1989); however, during the past 100 years many small springs and streams in Texas have ceased to flow permanently.

others of going dry as aquifer levels are diminished. For example, during times of low recharge and heavy pumping, Comal Springs at an elevation of 190 m above sea level (ASL) may cease to flow. These springs were dry for 5 months in 1956 at the height of a 7-year drought, and many of the individual spring openings were slowed to a trickle during minor dry periods occurring in 1984 and 1989-1990. In contrast, San Marcos Springs have the lowest elevation of the large springs (175 m ASL) and have never gone dry in known history. By comparison, San Antonio Springs (204 m ASL) and San Pedro Springs (201 m ASL) have been intermittent since the 1950's. However, as aquifer levels continue to drop, springflows at lower elevations also will decrease or cease completely. In turn, as springflows diminish, the streams they produce also will be negatively impacted.

Another drawback of excessive pumping is water quality degradation through encroachment of saline water referred to as the "bad water line". As pumping demands on the Edwards aquifer increases, hydrostatic pressure will decrease. In turn, the rate of encroachment of saline water also may increase. Longley (1992) reported that areas of saline water lie adjacent to the main artesian portion of the Edwards aquifer. A smaller, but geologically separated portion of the Edwards Aquifer (Barton Springs segment) already has had water quality lowered due to saline encroachment (Slade et al., 1986).

The human population of south-central Texas certainly will continue to grow, and as the population grows, pumping demands on area aquifers and other anthropogenic disturbances to surface springs and streams likely will increase. The Edwards Aquifer presently is the sole source of water for approximately 1.5 million people, as well as serving major industries, breweries, and recreational parks. However, current projections indicate that the human population directly dependent on the Edwards aquifer will exceed 1.6 million by the year 2000, and pumping from the aquifer, if unrestrained, will exceed 600,000 acre-feet annually. Since the average annual recharge of the Edwards aquifer over the past 50 years has been approximately 600,000 acre-feet (Guadalupe-Blanco River Authority, 1988), unrestrained pumping from the Edwards aquifer will equal or exceed average annual recharge by the end of this decade. Moreover, continued development in and around the cities of the Edwards Plateau will have a direct negative impact on these ecosystems and their respective biotas through alteration of areas in aquifer recharge zones.

BIOLOGICAL IMPORTANCE OF AQUATIC ECOSYSTEMS ASSOCIATED WITH THE EDWARDS AQUIFER

In addition to the five federally-listed species in the San Marcos Area, 48 other rare animal species tracked by the Texas Natural Heritage Program are dependent upon habitats associated with the Edwards Aquifer. These species occur in the aquifer recharge features, the aquifer itself, the springflows, or in river systems or bay systems fed by springflow, and include 11 fish, 9 amphibians, 3 reptiles, 20 invertebrates, and 6 birds (Table 1). Although extensive, this list may not be complete. Vertebrates are well documented in Texas (Davis, 1978; Dixon, 1987; Hubbs et al., 1991; Oberholser, 1974), but complete species inventories are lacking for most groups of aquatic invertebrates in the state.

Aquatic habitats of the Edwards Plateau also support a diverse fauna found nowhere else in the world. A total of 91 (includes one plant species) known species are apparently

IMPLICATIONS OF CONSERVATION OF THE EDWARDS AQUIFER

The potential losses from lowered quality and quantity of water resources of the Edwards Plateau, and Texas as a whole, are enormous. Several diverse ecosystems, including subterranean, spring, riverine, and estuarine complexes, and a large number of species found nowhere else in the world are dependent, either directly or indirectly, on the Edwards Aquifer and the springs it produces. In addition, these water resources support local and regional economies, including recreation, tourism, industry, agriculture, and downstream commercial and recreational fisheries. Because the human population is dependent upon this water, quality of life will be diminished as these resources continue to be impacted. Regional biodiversity will also be negatively impacted as water resources continue to disappear. While there are a number of potential solutions and protections for mitigating water conservation issues and preventing anthropogenic damage to these systems, much remains to be done to achieve these goals. Sound management plans and strategies, coordinated with support from government agencies, private business, and the general public are critical for the long-term protection of these aquatic resources.

While the federally-listed species occurring in the San Marcos and Comal Rivers were the focus of the recent lawsuit brought under the ESA, the unique biological aspects of the Edwards Aquifer point to a need for an ecosystem-level approach to conservation rather than a species-by-species approach. The conservation of the Edwards Aquifer offers a unique opportunity to conserve species ranging from terrestrial and cave-dwelling species in the recharge zone to marine organisms in the Gulf of Mexico through a comprehensive, coordinated effort. Such an approach will likely encompass several tactics, including conservation, proper management of recharge areas, regulated use, development of surface water with minimal environmental impacts, and careful regulation of flow from such impoundments to meet both human and conservation needs. Although listed species have forced action to bring about the comprehensive management of the Edwards Aquifer, that management will result in long-term sustainability of an entire ecosystem.

Such an approach has several human as well as biological benefits. Through conservation of a functioning system, it is likely that future listings of endangered species may not be necessary, or that, even if additional Edwards Aquifer species are listed in the future, additional regulatory efforts may not be needed. In addition, actions taken at an ecosystem level at this time may prove more cost effective, such as reducing demand and improving efficiency of water use through education and improved technology, than action taken at a later date in response to another localized problem. Most importantly, through ensuring a clean, adequate water supply for natural spring systems in the Edwards Plateau, one also ensures that high quality water will continue to be available for human use now and in the future.

As reauthorization of the Endangered Species Act is considered, several recommendations are offered based on the Edwards Aquifer experience. First and foremost, the ability to identify and address ecosystem-level problems should be strengthened. Although the ESA now recognizes the connection between rare species and imperiled ecosystems, implementation of the Act, including enforcement and funding, still focuses on listed species. Addressing ecosystem-level problems should be a higher priority in reauthorization, which will result in the several benefits noted above.

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TABLE 1.
CLASSIFIED SPECIES DEPENDENT ON THE EDWARDS (BALCONES FAULT ZONE) AQUIFER

Species	Federal	State	TXNHP	Distribution
Plants				
Zizania texana Texas wild-rice	LE	E	G1S1	San Marcos River
Fishes				
Trogloglanis pattersoni Toothless Blindcat	C2	T	G1S1	San Antonio Pool
Satan eurystomus Widemouth Blindcat	C2	T	G1S1	San Antonio Pool
Cyprinella proserpina Proserpine Shiner	C2	T	G3S2	
Dionda diaboli Devil's River Minnow	C1	T	G2S1	Devil's River
Dionda argentosa Roundnose Minnow	-	-	G5S5	Devil's River
Dionda serena	-	-	-	headwaters of Nueces River
Dionda sp.	-	-	-	headwaters of Guadalupe and Colorado rivers
Gambusia georgei San Marcos Gambusia	LE	E	GXSX	San Marcos River (presumed extinct)
Gambusia geiseri Largespring Gambusia	-	-	G4S4	San Marcos River
Gambusia heterochir Clear Creek Gambusia	LE	E	G1S1	Clear Creek
Gambusia senilis Blotched Gambusia	C2	E	G4SX	
Etheostoma fonticola Fountain Darter	LE	E	G1S1	upper San Marcos River, Comal River
There are a number of additional darters endemic to the Plateau.				
Micropterus treculi Guadalupe Bass	C2	-	G3S3	prennial, headwater type, streams of the Plateau, as well as dowstream

Species	Federal	State	TXNHP	Distribution
Stygobromus bifurcatus Bifurcated Cave Amphipod	C2	-	G1S1	Kendall and Travis counties (& others)
Stygobromus dejectus Cascade Cave Amphipod	C2	-	G1S1	Kendall County
Stygobromus flagellatus Ezell's Cave Amphipod	C2	-	G1S1	San Marcos Pool
Stygobromus longipes Long-legged Cave Amphipod	C2	-	G1S1	Kendall County
Stygobromus pecki Peck's Cave Amphipod	C2	-	G1S1	Comal Springs
Stygobromus reddellii Reddell's Cave Amphipod	C2	-	G1S1	
Stygobromus hadenoecus Devil's Sinkhole Amphipod	C2	-	G1S1	Devil's Sinkhole
Palaemonetes antrorum Texas Cave Shrimp	C2	-	G1S1	San Marcos Pool
Macrobrachium carcinus Large River Shrimp	-	-	-	juveniles in estuarine & Gulf waters; adults in San Marcos & Guadalupe River systems; unique species found only in Florida and Texas
.Cylindropsis sp. Tooth Cave Blind Rove Beetle	3A	-	G1S1	Jollyville Plateau
Haideoporus texanus Edwards Aquifer Water Beetle	C2	-	G1S1	San Marcos area
Heterelmis comalensis Comal Springs Water Beetle	C2	-	G1S1	Comal Springs
.Rhadine persephone Tooth Cave Ground Beetle	LE	-	G1S1	Jollyville Plateau
.Texamaurops reddelli Kretschmarr Cave Mold Beetle	LE	-	G1S1	Jollyville Plateau
Protoptila arca San Marcos Saddle-case Caddisfly	C2	-	G1G3 S1S3	San Marcos area
.Microcreagris texana Tooth Cave Pseudoscorpion	LE	-	G1S1	Jollyville Plateau
.Texella reddelli Bee Creek Cave Harvestman	LE	-	G1S1	Jollyville Plateau

EXPLANATION OF CODES IN TABLE 1

FEDERAL STATUS (USESA)

LE - Listed Endangered
LT - Listed Threatened
LELT - Listed Endangered in part of range, Threatened in a different part
PE - Proposed to be listed Endangered
PT - Proposed to be listed Threatened
E(S/A) or T(S/A) - Listed Endangered or Threatened on basis of Similarity of Appearance.
C1 - Candidate, Category 1. USFWS has substantial information on biological vulnerability and threats to support proposing to list as endangered or threatened. Data are being gathered on habitat needs and/or critical habitat designations.
C1* - C1, but lacking known occurrences
C1** - C1, but lacking known occurrences, except in captivity/cultivation
C2 - Candidate, Category 2. Information indicates that proposing to list as endangered or threatened is possibly appropriate, but substantial data on biological vulnerability and threats are not currently known to support the immediate preparation of rules. Further biological research and field study will be necessary to ascertain the status and/or taxonomic validity of the taxa in Category 2.
C2* - C2, but lacking known occurrences
C2** - C2, but lacking known occurrences, except in captivity/cultivation
3 - Taxa no longer being considered for listing as threatened or endangered. Three subcategories indicate the reasons for removal from consideration.
3A - Former Candidate, rejected because presumed extinct and/or habitats destroyed
3B - Former Candidate, rejected because not a recognized taxon; i.e. synonym or hybrid
3C - Former Candidate, rejected because more common, widespread, or adequately protected
XE - Essential Experimental Population.
XN - Non-essential Experimental Population.

STATE STATUS

E - Listed as Endangered in the State of Texas
T - Listed as Threatened in the State of Texas

GLOBAL RANK (GRANK)

G1 - Critically imperiled globally, extremely rare, 5 or fewer occurrences. [Critically endangered throughout range.]
G2 - Imperiled globally, very rare, 6 to 20 occurrences. [Endangered throughout range.]
G3 - Very rare and local throughout range or found locally in restricted range, 21 to 100 occurrences. [Threatened throughout range.]
G4 - Apparently secure globally.

Table 2. The largest springs in Texas (from Brune, 1981).

Spring	County	Average Discharge (liters/second)
Comal	Hays	9,000
San Marcos	Hays	4,300
Goodenough[1]	Val Verde	3,900
San Felipe	Val Verde	2,600
Barton	Travis	1,400
San Antonio[2]	Bexar	1,400
Hueco	Comal	1,100
Comanche[3]	Pecos	990
San Solomon[4]	Reeves	950
Big Paint	Edwards	670
Las Moras	Kinney	620
Salado	Bell	460
Seven Hundred	Edwards	460
Government	Schleicher	420
Wilkinson	Menard	410
Adams	Sutton	390
Phantom Lake[4]	Jeff Davis	330

[1] Extirpated by International Lake Amistad in 1968.

[2] Intermittent since 1947.

[3] Dry since 1961.

[4] Not on Edwards Plateau.

TESTIMONY BEFORE THE SUBCOMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES ON THE IMPLICATIONS OF THE ENDANGERED SPECIES ACT AS REGARDS THE EDWARDS AQUIFER

BY
DR. LARRY D. MCKINNEY
DIRECTOR OF RESOURCE PROTECTION
TEXAS PARKS AND WILDLIFE DEPARTMENT
JULY 6,1993

Texas Parks and Wildlife Department (TPWD) is the state agency primarily responsible for the protection of the state's fish and wildlife resources (Parks and Wildlife Code Section 12.0011). The Department has the biological expertise and associated resources necessary to meet that responsibility. In addition, TPWD has actively undertaken research and management actions to address endangered species issues throughout the state. As a result no other state or federal agency is in a better position to judge the biological implications of the Endangered Species Act (ESA) in Texas.

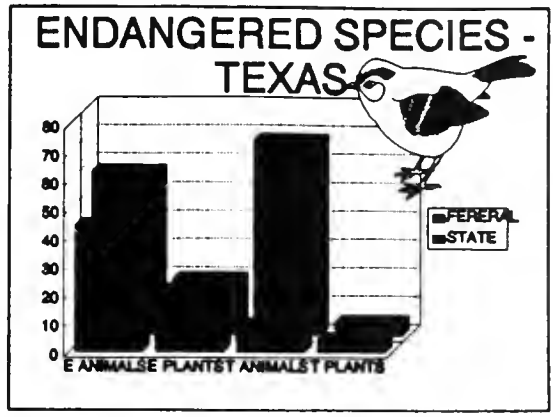
The committee has requested TPWD's testimony on only one issue related to implementation of the ESA in Texas: the Edwards Aquifer. While that request does greatly limit the scope of what TPWD could offer regarding the reauthorization of the Act, the time constraints of the committee are understandable the opportunity to provide this testimony is appreciated . A more detailed response to specific biological questions asked of the Department in the Committee's invitation letter have been included as an attachment. The remainder of the introductory statement will focus on a number of points in which the Edwards Aquifer issue illustrates important aspects of the ESA, both positive and negative.

SPECIES VERSUS ECOSYSTEMS. One of the key failings of the ESA has been its focus on species rather than ecosystems. Congress adopted the original act in 1973 with a stated purpose:

> "to provide a means whereby the ecosystems upon which endangered species depend may be conserved".

The failure of this approach is well exemplified in the Edwards where biological concern is focused primarily on five species: two fish, two salamanders, and a plant, the Texas wild rice. The United States Fish and Wildlife Service (USFWS) and others, including TPWD to some extent, have focused on them in assessing spring flows and undertaking biological studies. However, some 24+ other species also found in this ecosystem are candidates for listing as potentially in need of protection, and are not being as carefully considered. By ignoring them now do we just put off a problem to the future? Yes, that is likely. Does it not make more sense to look at the ecosystem as a whole and determine what flows are needed to maintain its health and function, and in so doing do we not provide for all the

species living there, listed or not? Yes, it makes good biological sense to do so, but the current constraints of the ESA and its implementation make that very difficult. Federal funds and focus for studies and management are tied to listed species and little is available help prevent the listing of species.



The Edwards is only one endangered species issue among many in Texas and accounts for only 6% of the 82 listed species found in the state. An additional 305 species are listed as candidates. If nothing else the numbers alone make it clear that we must use a broader concept than a species by species approach if we hope to meet the intent of the ESA and not see a significant decline in biodiversity and all that implies.

THE ROLE OF STATE FISH AND WILDLIFE AGENCIES. Such inadequate funding limits the ability of state fish and wildlife agencies to play a more significant role in conserving these species. TPWD, for example, has resources and expertise that could greatly benefit both the USFWS and affected Texans in meeting the requirements of the ESA but is limited by a lack of funding to do so. The Edwards is a particular case in point where critical decisions of tremendous political and economic import are being driven by the need to very precisely define habitat requirements in the terms of flow from the springs, yet relatively little funding is available to answer those basic ecological questions upon which such determinations will be made.

The current approach to implementing the ESA does not provide the opportunity for an ecosystem approach, except in the broadest sense. When push comes to shove the USFWS is forced to favor species needs over ecosystem needs. This is perhaps an understandable consequence of the relatively insignificant funding that the USFWS has received to implement the program. It was pointed out in a recent forum that the people of Washington D.C. spend more on Domino's Pizza each year that the federal government expends on endangered species.

SOLVING PROBLEMS OR PASSING THE BUCK? The focus on species, rather than ecosystems also has expression in the way we are attempting to solve the Edwards problem. Many of the solutions to the Edwards issue have tended to be as myopic as how we have attempted to deal with endangered species in the ESA, and if we continue the result will be the same. As can be noted in the written materials the Edwards Aquifer is but a part, although a significant and unique part, of a much bigger ecosystem that stretches from the hill country to the coast of Texas. The actions taken to solve one problem, like building surface reservoirs to provide San

Antonio with water from other than aquifer, affect another part because those reservoirs can adversely affect other endangered species like whooping cranes and cause severs economic impacts to coastal industries . Recharging the aquifer from surface rivers diverts that water from users in other basins and augmentation schemes have similar drawbacks. Every action has a ripple effect that if not considered will likely defeat the benefit gained.

The city of San Antonio has understandably focused on only its own problems , as have agricultural interests to the west, and downstream users to the east. If that were not the case a solution would have been reached long ago. Those entities, like the Texas Water Commission, chargedwith finding a comprehensive solution have had little succes. Unfortunately, if we do not consider the problem as a whole, as an ecosystem, we will not solve the problem, but merely pass the buck to others. To date such broad concerns have been given little but passing acknowledgement by the individual entities in addressing the problem, but the biological implications of failing to do so are clear. Recently passed legislation provides some hope that the broader picture will be considered, but the history of such efforts does not bode well for success. It is clear that If we do not deal holistically with such issues, partlcularly the biological Issues, we will only delay meaningful resolution to the point where few if any options are available and perhaps everyone loses.

IMPACT OF THE ESA ON WITHDRAWAL OF WATER FROM THE EDWARDS AQUIFER.

Setting aside the debate about the ESA, its social, economic, and environmental implications it seems clear that the ESA has had one important and positive benefit regarding the Edwards Aquifer Issue, and that has been to focus, perhaps force is a better term, all of us to finally come to grips with the issue and devise a mechanism to assure the future of not only the springs, but the aquifer. More than one water expert has stated that the Edwards is not an endangered species Issue, but a water issue, and that the ESA is only making us look at it now rather than in the future. That is a key point because it is also clear that we in Texas have universally failed to address such problems in the past. Some 281 major and historical springs have been identified as existing in Texas at some time in the past. Of the four very largest only two remain: San Marcos and Comal. Of the 31 large springs, only 17 remain. Altogether 63 of our major springs had failed by 1973 and one estimate is that the number of springs no longer flowing has doubled since then. None of those springs ceased from natural causes.

The most significant impact of the ESA in regard to the Edwards issue has been to give a signal and warning, the proverbial canary in the coal mine, that we must seriously address, not only issues like water quality and pollution, but biodiversity. That we must do so now, before our best options are foreclosed, and that we must do holistically.

It is easy to realize the consequences of not listening to such warnings and of failing to balance economic and development needs with maintaining a healthy environment. You only have to look to eastern Europe where economic "necessity" routinely overrode environmental impact. As a result:

In Poland only 5% of surface water is suitable for human consumption and 60% of its water is so polluted that it cannot be used for even industrial purposes.

In Czechoslovakia over 4,000 miles of river contain no fish.

In the former Soviet Union 50 million people live in ecologically hazardous areas.

To even begin to clean up the environment in eastern Europe over the next ten years the World Bank estimates a cost of $200 billion.

Like it or not, the ESA has forced us to confront such issues in Texas and that is to our benefit and the benefit of future Texans.

STATEMENT ON BEHALF OF EDWARDS AQUIFER
INDUSTRIAL WATER USERS

Endangered Species Act Hearing
by
Committee on Merchant Marine and Fisheries
United States House of Representatives

Henry B. Gonzalez Convention Center
San Antonio, Texas
1:30 p.m. July 6, 1993

Honorable Tom Loeffler

Jay Gwin
Catherine Cralle
Haynes and Boone, L.L.P.

I. THE PROBLEM

The Guadalupe Blanco River Authority (GBRA) and the Sierra Club filed a lawsuit under the Endangered Species Act (ESA) against the Secretary of the Interior and the United States Fish & Wildlife Service (USFWS) in 1991 (Sierra Club v. Lujan) to compel regulation of pumping from the Edwards Aquifer. The purpose of the lawsuit was not to protect endangered or threatened species, but rather to guarantee springflow at Comal and San Marcos Springs and, consequently, streamflow in the Guadalupe River.

On February 1, 1993, United States Federal District Court Judge Lucius Bunton issued an Order providing that the ESA applies to pumping from the Edwards Aquifer and that 100 cfs springflow at Comal Springs must be maintained at all times under all conditions, including the worst drought in history, in order to protect the Fountain Darter, an endangered species of fish. The effect of a requirement to maintain 100 cfs springflow at Comal Springs during a repeat of the drought of record is that total pumping from the Aquifer must be limited to a maximum amount of approximately 165,000 acre feet of water per year. To put this pumping limitation in perspective, total pumping from the Aquifer in the dry years 1988, 1989 and 1990 averaged 524,000 acre feet of water per year.

Judge Bunton's Order will result in pumping limitations that will reduce the amount of water that can be pumped from the Aquifer by more than 68 percent from average pumping levels in 1988, 1989 and 1990. No alternative supplies are currently available to satisfy this deficit. Judge Bunton's Order is a gross misapplication of the ESA and, if upheld, will result in disastrous economic and social consequences for the people and businesses of Bexar County and the entire Edwards Aquifer region.

II. THE FACTS

The Edwards Aquifer is the lifeblood of 1.5 million people in five counties in South Central Texas. The Aquifer is approximately 175 miles long extending through Uvalde, Medina, Bexar, Comal and Hays Counties and ranges from 5 to 30 miles in width. It is approximately 3,600 square miles in size -- equivalent in area to the states of Delaware and Rhode Island. The Aquifer is the principal source of water for the Edwards Aquifer region, and the sole source of water for more than 1,200,000 residents of San Antonio.

There are five categories of water users within this five-county area that rely upon the water in the Edwards Aquifer:

a. Municipal users, which occur primarily in San Antonio, but also include the municipalities of San Marcos, New Braunfels, Hondo, Uvalde and other cities and towns within the Edwards Aquifer region;

b. Industrial users, which occur primarily in Bexar County, but also occur in the other counties in the Edwards Aquifer region;

c. Irrigated agricultural users, which occur primarily in Uvalde and Medina Counties, but which also occur in the other counties in the Edwards Aquifer region.

d. Recreational users, which occur primarily in Comal and Hays Counties;

e. Domestic and stock users, which occur throughout the Edwards Aquifer region.

The Edwards Aquifer is the source of water for the two largest natural springs in Texas, namely, Comal Springs in New Braunfels and San Marcos Springs in San Marcos. The Aquifer generally declines in elevation from west (Uvalde and Medina Counties) to east (Comal and Hays Counties). Water discharged from the Aquifer at Comal Springs flows into the Comal River and then into the Guadalupe River. Similarly, water discharged from San Marcos Springs flows into the San Marcos River and then into the Blanco and Guadalupe Rivers.

Springflow rates at Comal and San Marcos Springs are determined primarily by the water level of the Edwards Aquifer. The water level fluctuates depending upon two variables: recharge and pumping rates. Recharge and pumping are significantly influenced by weather conditions. The

Aquifer is replenished through recharge from surface water runoff resulting from rainfall events. The amount, rate and location of rainfall determine the extent to which recharge occurs. During the period from 1934 to 1990, the average annual recharge to the Aquifer was approximately 636,700 acre feet, ranging from a low of approximately 43,700 acre feet in 1956 to a high of approximately 2,003,600 acre feet in 1987.

Water is discharged from the Edwards Aquifer through springflow and pumping. Historically, the combined springflow of Comal and San Marcos Springs has averaged approximately 150,000 to 200,000 acre feet per year. However, during dry periods, springflow declines because there is less recharge and increased pumping. The effect of declining springflow is that less water from the Aquifer flows out of the springs and into the Guadalupe River. Comal Springs ceased flowing for approximately five months in 1956 during the drought of the 1950s. This drought is referred to as the "drought of record," and is considered by meteorologists to have a recurrence frequency of not more than once every 150 to 200 years. San Marcos Springs continued to flow during the 1950's drought because it is lower in elevation than Comal Springs.

The amount of annual pumping from the Aquifer varies significantly depending primarily upon the amount, timing and location of rainfall. Total pumping from the Aquifer during the three highest water demand years since 1980 averaged approximately 537,400 acre feet per year, as follows:

Year	Total Pumping (Acre Feet)
1988	529,800
1989	540,000
1990	542,400

Total pumping from the Aquifer during the last three years of the decade of the 1980s averaged approximately 524,000 acre feet per year as follows:

Year	Total Pumping (Acre Feet)
1984	540,000
1988	542,400
1989	489,400

III. THE PURPOSE AND STRUCTURE OF THE ESA

A. General. The ESA was adopted in 1973 in order to conserve endangered and threatened species and the ecosystems on which those species depend. In order to attain these goals, the ESA requires the Secretary to develop information deemed essential to the conservation of species, including the listing of endangered and threatened species, the listing of critical habitat for those species, and the preparation of plans for the recovery of those species. The term "endangered species" means any species in danger of extinction throughout all or a significant portion of its range. The term "threatened species" mean any species which is likely to become endangered within the foreseeable future. "Critical habitat" includes the area occupied by the species which contains features essential to the conservation of the species and which may require special management or protection.

B. Federal Agencies. The ESA applies to actions by federal agencies and private parties. In the case of federal agencies, Section 7 of the ESA requires that each federal agency use its authority to conserve endangered and threatened species. Specifically, each agency must consult with the Secretary of the Interior to ensure that its actions are not likely to: a) "jeopardize" the continued existence of any endangered or threatened species, or b) result in the destruction or adverse modification of "critical habitat." If any proposed federal action will likely produce such results and no reasonably prudent alternative is available, the proposed federal action cannot proceed unless the agency obtains an exemption from the Endangered Species Committee. Because the Committee is required to determine whether an action should proceed even though the action may result in the extinction of a species, the Committee is often referred to as the "God Committee." Throughout the history of the ESA, only three applications have ever been submitted to the God Committee for such an exemption. The first application involved the Tennessee Valley Authority's Tellico Dam project in 1978 in which the Committee, in a decision later overturned by Congress, unanimously denied the application. In the second instance, the Committee granted an exemption for the Grayrocks Dam in 1978 with provisions for mitigating damage to whooping crane habitat. Finally, earlier in 1993, the Committee granted an exemption for 13 of 44 individual timber sales within the habitat of the spotted owl.

C. Private Parties. In addition to restricting the activities of federal agencies, Section 9 of the ESA restricts private action. It is a violation of the ESA for any person to "take" a protected species of wildlife. Under the Act and its

regulations, the term "take" is broadly defined to include significant habitat modification or destruction that actually kills or injures protected wildlife by significantly impairing essential behavioral patterns such as breeding, feeding or sheltering. Therefore, not only is it a violation of the ESA to directly kill a protected species by shooting or trapping, but it is also unlawful to modify the habitat of the species if that modification impairs essential behaviors such as feeding or breeding. Although Section 10 of the ESA provides an exemption for takings which are incidental to and not the purpose of an otherwise lawful activity, only 11 such permits have ever been granted by the Secretary. Obtaining such a permit is a lengthy and costly undertaking. The applicant must demonstrate that the taking is incidental to, and not the purpose of, an otherwise lawful activity. The applicant must also demonstrate that it has, to the maximum extent practicable, minimized the impact of the taking, and must present a conservation plan that includes mitigation together with assurance of adequate funding.

IV. MISAPPLICATION OF THE ESA IN THE EDWARDS AQUIFER CONTROVERSY

A. Erroneous Application of ESA. The purpose of the Edwards Aquifer Endangered Species Litigation was not to protect endangered species, but rather was to guarantee springflow at Comal and San Marcos Springs and, consequently, streamflow in the Guadalupe River. In effect, the ESA was used by GBRA as a Machiavellian tool to limit pumping in the Edwards Aquifer region so that more water would flow into the Guadalupe River. Clearly, the ESA was never intended to be applied in this manner.

The ESA is usually applied to evaluate and minimize the impact on endangered and threatened species of specific human development activity, such as the construction of federal highway or dam projects, the development of housing or commercial property, and the logging of timber. The Edwards Aquifer case does not involve the impact of specific, prospective activity -- it involves the projected impact of ongoing human activity (pumping) in the context of a severe drought that is likely to recur only once every 150 to 200 years.

Further, the Edwards Aquifer case does not involve one human activity, but rather the collective impact of the actions of thousands of pumpers. Most ESA cases involve prohibitions against one central actor, such as TVA's construction of the Tellico Dam, EPA's registration of pesticides, or a particular developer with a particular project. The Edwards Aquifer case,

however, involves the imposition of pumping limitations on all pumpers to prohibit the collective impact of individual activities (low springflow) under certain climatic conditions (moderate - severe drought). By extension of this rationale, if it was shown that carbon monoxide exhaust impaired the reproduction of an endangered bird, the operation of all automobiles in the affected area would have to be restricted. Certainly, Congress did not intend the ESA to be applied so broadly.

B. Experimental Population. One of the major problems in the Edwards case is that the protections typically afforded native species have been erroneously applied to the population of Fountain Darters at Comal Springs, which is a reintroduced population. The original population was twice eliminated and twice reintroduced. In the early 1950s the State of Texas killed the entire population of Fountain Darters in the Comal River ecosystem through the application of rotenone, a poison used to kill certain nuisance fish in the river. After the poisoning was completed, two jars full of Fountain Darters were reintroduced to the river. Within a few years following the rotenone application and the reintroduction of a small number of Fountain Darters, the Fountain Darter population in the Comal River ecosystem was approximately 100,000.

The entire population of Fountain Darters in the Comal River ecosystem again died in 1956 when Comal Springs ceased flowing during the drought of the 1950s. In the early 1970s, approximately 450 Fountain Darters from the San Marcos River were used to restock the Comal River. Recent studies indicate that this reintroduction was highly successful because there are currently more than 164,000 Fountain Darters in the Comal River.

Because the population of Fountain Darters at Comal Springs is a reintroduced population, it should be considered an "experimental population" under § 10(j) of the ESA and managed as a "threatened" rather than an "endangered" species. Such a designation would allow greater flexibility in the management of the Fountain Darter population and would avoid the extraordinarily adverse economic and social consequences described below.

C. De Facto Determination of Critical Habitat. Another significant problem in the Edwards case is that Judge Bunton considered both the Comal River ecosystem and the San Marcos River ecosystem to be "critical habitat" for the Fountain Darter. USFWS has not designated Comal Springs as critical habitat for any protected species, and it is highly unlikely that Comal Springs could be designated as a critical habitat

because economic factors must be taken into account when designating critical habitat. As discussed below, devastating economic and social consequences will result if Comal Springs is determined to be a critical habitat for the Fountain Darter. Furthermore, the term "critical habitat," as used in the ESA, does not include the entire geographic area inhabited by a species. Critical habitat includes only the area occupied by a species which contains features essential to the conservation of the species, and which may require special management or protection. The San Marcos River ecosystem is the only designated critical habitat for any of the species at issue in the Edwards Aquifer case.

Even though the Fountain Darter population in the Comal River ecosystem is an introduced population, USFWS has determined that the Comal population is essential to the conservation of the entire population of Fountain Darters. Further, USFWS has indicated that because the springs and the habitat they provide are dependant upon pumping, they require special management. Through its evaluation of the Comal River ecosystem, USFWS has, in effect, made a de facto designation of Comal Springs as a critical habitat for the Fountain Darter, but has not complied with the statutory requirements incident to such a determination. Clearly, such an ad hoc determination is beyond the authority of USFWS under the ESA.

V. ECONOMIC IMPACT OF APPLICATION OF ESA TO EDWARDS AQUIFER CASE

On February 1, 1993, Federal District Court Judge Lucius Bunton issued an Order in the Edwards Aquifer Endangered Species Litigation specifying the springflow levels at which a "take" and "jeopardy" of Fountain Darters occur at Comal Springs, which will result in pumping limitations and cause severe economic impacts for the people and businesses of the Edwards Aquifer region. Judge Bunton provided interim findings that Fountain Darters are "taken" whenever the Comal springflow drops to an undefined springflow greater than 100 cfs, and ordered USFWS to make a determination of that springflow level. In its report of April 15, 1993, USFWS determined that Fountain Darters are currently taken whenever Comal springflow drops to 200 cfs. If, however, certain non-native snails can be controlled, springflow may drop as low as 150 cfs without causing a "take" of Fountain Darters.

Judge Bunton also provided interim findings that the "continued existence" of the Fountain Darter as a species is "jeopardized" whenever the flow at Comal Springs drops to an undefined springflow greater than 0 cfs, and ordered USFWS to make a determination of that springflow level. In its report

of June 15, 1993, USFWS determined that the continued existence of Fountain Darters as a species is currently jeopardized whenever springflow at Comal Springs drops to 150 cfs. USFWS further determined that if a management plan is in place to control the timing and duration of low flows, springflow can be allowed to drop as low as 100 cfs without jeopardizing the Fountain Darter.

According to these findings, springflow at Comal Springs must be maintained above 200 cfs in order to avoid a taking of Fountain Darters and must be maintained above 150 cfs to avoid jeopardizing their existence. Based upon hydrologic models, in order to maintain even 100 cfs at Comal during a repeat of the drought of record, total pumping from the Aquifer must be limited to 165,000 acre feet per year, which is a more than 68 percent reduction from average pumping during 1988, 1989 and 1990. In order to provide constant springflow at Comal Springs of 150 cfs as required by USFWS determinations to avoid jeopardy, pumping would have to be restricted even further. No significant amounts of non-Aquifer water can be brought on line in Bexar County to replace water lost due to pumping limitations in less than five years under the most optimistic circumstances.

The draconian pumping limitations resulting from Judge Bunton's Order will impact the economy of the Bexar County in two ways: first, the pumping limitations will result in the loss of more than 163,000 acre feet of water per year in Bexar County; second, Bexar County will be forced to replace water lost due to pumping limitations before it can develop any water necessary for future growth. M. Ray Perryman, a well-respected Texas economist, testified in the Edwards Aquifer Endangered Species Litigation that reducing the total amount of water pumped in Bexar County from the Aquifer to maintain 100 cfs continuous natural springflow at Comal Springs during a repeat of the drought of record would result in the following annual adverse impact on the economy of Bexar County, assuming that all pumpers reduce their pumping proportionally:

1) $9,643,600,000 reduction in total spending;

2) $5,522,300,000 reduction in total output;

3) $3,252,200,000 reduction in personal income;

4) $2,592,800,000 reduction in wages and salaries; and

5) $1,269,600,000 reduction in retail sales.

Additionally, Dr. Perryman testified that this pumping limitation would result in the loss of 136,703 permanent jobs, and would have a grossly disproportionate impact on racial minority workers and their families.

The estimated cost for Bexar County to develop alternative sources of water to replace 163,000 acre feet of water per year lost due to pumping limitations ranges from $500,000,000 to $1,500,000,000, depending upon the type, location and blending of alternative sources. These costs do not include the cost of developing any water for future growth. Dr. Perryman testified that the cost of developing alternate sources to replace water lost due to pumping limitations would result in the following additional annual adverse economic impacts on Bexar County:

1) $207,500,000 reduction in total spending;

2) $116,000,000 reduction in total output;

3) $65,300,000 reduction in personal income;

4) $59,200,000 reduction in wages and salaries; and

5) $63,200,000 reduction in retail sales.

Additionally, these costs would result in the loss of 3,123 permanent jobs.

VI. REASONABLE ALTERNATIVES TO SEVERE PUMPING LIMITATIONS

The municipal and industrial water users in Bexar County recognize that the Edwards Aquifer must be managed in order to maximize the availability of water from the Aquifer. These users strongly supported Senate Bill 1477, which was passed by the Texas Legislature in the recently completed Regular Session. The legislation provides for the comprehensive regulation and management of the Aquifer in which average discharge through pumping and springflow is balanced against average recharge. The Edwards Aquifer legislation will ensure continuous natural springflow at San Marcos Springs during a repeat of the drought of record, and will ensure springflow at Comal Springs except during a repeat of the drought of record.

As stated above, meteorologists have determined that the drought of record is an event that is likely to recur once every 150 to 200 years. In view of this recurrence interval and the availability of practical alternatives, it is clearly unreasonable to interpret the ESA to require continuous natural springflow at all times under all conditions, including the drought of record.

The Fountain Darter is the only listed endangered or threatened species found in the Comal River ecosystem. The Fountain Darter population in the Comal River ecosystem can be sustained during periods of low springflow caused by severe drought without imposing severe pumping limitations which will result in the catastrophic economic and social consequences described above. Specifically, the Comal Fountain Darter population can be sustained during low springflow conditions by maintaining streamflow in the Old Channel of the Comal River.

The Old Channel is the original channel of the Comal River. At the turn of the century, the natural channel of the Comal River was diverted in order to develop hydro-electric power. The diverted channel is now considered the Comal River, while the original Comal River is now referred to as the Old Channel of the Comal River.

The streamflow of the Old Channel averages between 7-10 cfs, which is the equivalent of approximately 7,200 acre feet of water per year. Current studies estimate that more than one-half of the entire Fountain Darter population in the Comal River ecosystem (91,081 of a total 168,000) lives in the Old Channel. Continuous natural springflow from Comal Springs into the Comal River ecosystem is not necessary to sustain a viable population of Fountain Darters in the Comal River. During low springflow conditions, water of sufficient quality and quantity can be delivered into the Old Channel to preserve the Fountain Darter population there.

The estimated cost to deliver water of sufficient quality and quantity into the Old Channel at a flow rate of 10 cfs is not more than approximately $30 million. The economic impact of financing this reasonably prudent alternative is negligible in comparison with the severe adverse economic impact of limiting pumping in order to maintain continuous springflow at Comal Springs at all times under all conditions, including the drought of record.

Alternatively, Fountain Darters are easily collected in times of declining springflows, and easily maintained and propagated in the laboratory. Studies indicate that the Fountain Darter can tolerate and breed in a fairly wide range of temperatures.

CONGRESSIONAL TESTIMONY - H. B. ZACHRY, JR. CONGRESSIONAL HEARINGS: REAUTHORIZATION OF THE ENDANGERED SPECIES ACT

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, MY NAME IS BARTELL ZACHRY, CHAIRMAN OF THE BOARD OF THE H. B. ZACHRY COMPANY, A PRIVATELY-HELD CONSTRUCTION COMPANY HEADQUARTERED IN SAN ANTONIO. I AM TESTIFYING BEFORE YOU IN MY ROLE AS CHAIRMAN OF THE SAN ANTONIO ECONOMIC DEVELOPMENT FOUNDATION. THIS PRIVATELY-FUNDED ORGANIZATION IS RESPONSIBLE FOR OUR COMMUNITY'S OUTSIDE INDUSTRIAL RECRUITMENT FOR THE DEVELOPMENT OF JOBS AND OPPORTUNITY FOR OUR CITIZENS.

PUBLIC AND LEGISLATIVE CONCERNS ABOUT ENVIRONMENTAL QUALITY PRODUCED THE LANDMARK LEGISLATION ENTITLED THE ENDANGERED SPECIES ACT. A SUFFICIENT PERIOD OF TIME HAS ELAPSED TO ALLOW FOR LEGISLATIVE ASSESSMENT OF THIS ACT'S ADMINISTRATION AND IMPACT AS IT RELATES TO CONGRESSIONAL INTENT AND SHORTCOMINGS IN ITS IMPLEMENTATION.

YOU ARE TO BE COMMENDED FOR HOLDING THESE HEARINGS IN THE HEART OF THE EDWARDS AQUIFER REGION, A REGION UNDER FIRE IN A FEDERAL LAWSUIT FILED UNDER THIS ACT.

A RECENT FEDERAL DISTRICT COURT'S REVIEW OF THIS ACT ILLUSTRATES THE NEED FOR CONGRESSIONAL ACTION. PUMPING LIMITATIONS AS SET BY THE COURT COULD STILL BE IMPOSED ON THIS REGION. IT WOULD BE DISASTROUS. THE IMPORTANCE OF THE THREATENED SPECIES OR CRITTERS (SUBJECTS OF THIS LAWSUIT) TO THE MAINTENANCE OF OUR ECOSYSTEMS WAS NOT PERTINENT; NOR WERE THE LIVELIHOODS AND QUALITY OF LIFE OF MILLIONS OF PEOPLE. WE REMAIN HOPEFUL, HOWEVER, THAT THE FEDERAL DISTRICT COURT WILL DISMISS THE LAWSUIT BECAUSE OF THE OUTSTANDING LEGISLATIVE COMPROMISE JUST CRAFTED BY THE TEXAS LEGISLATURE.

I WOULD LIKE TO HIGHLIGHT THE ECONOMIC IMPACT TO OUR LOCAL COMMUNITY SHOULD PUMPING LIMITS BE IMPOSED. THE

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SOURCE OF THESE FIGURES IS THE AFFIDAVIT OF DR. RAY PERRYMAN, ECONOMIST IN RESIDENCE AT BAYLOR UNIVERSITY. A COPY OF DR. PERRYMAN'S SWORN STATEMENT HAS BEEN PROVIDED TO THE COMMITTEE AS PART OF THIS HEARING'S RECORD. THE STATEMENT INCLUDES DR. PERRYMAN'S ACADEMIC CREDENTIALS, METHODOLOGY, AND SPECIFIC DOLLAR IMPACTS UNDER VARIOUS SCENARIOS.

THE FEDERAL COURT FOUND FOR A REDUCTION IN THE PUMPING OF THE EDWARDS AQUIFER FROM 450,000 ACRE FEET (HISTORIC USE) TO 200,000 ACRE FEET. INDUSTRIAL AND MILITARY USERS' HISTORIC CONSUMPTION IS 54,000 ACRE FEET ANNUALLY. A REDUCTION OF THIS MAGNITUDE WOULD, IN THE COURT'S OPINION, PROVIDE THE MINIMUM SPRING FLOW NECESSARY FROM COMAL SPRINGS TO ENSURE THAT THE FOUNTAIN DARTER WOULD NO LONGER BE "JEOPARDIZED."

UNDER THIS SCENARIO, WITH A PROPORTIONAL REDUCTION BY USERS, DR. PERRYMAN'S ANNUAL ECONOMIC IMPACT ON BEXAR COUNTY RESULTS IN:

A REDUCTION IN TOTAL SPENDING:	$7.5 BILLION
A REDUCTION IN TOTAL OUTPUT:	$4.3 BILLION
A REDUCTION IN PERSONAL INCOME:	$2.5 BILLION
A REDUCTION IN WAGES/SALARIES:	$2 BILLION
A REDUCTION IN RETAIL SALES:	$1 BILLION
A LOSS IN PERMANENT JOBS:	100,000

REPLACEMENT COSTS OF 250,000 ACRE FEET OF WATER FINANCIALLY RANGE FROM $500 MILLION TO $1.5 BILLION DEPENDING UPON THE AVAILABILITY AND COMBINATION OF SOURCES. DURING THIS DIVERSION OF RESOURCES FOR ALTERNATE SOURCE DEVELOPMENT, REDUCTIONS WOULD OCCUR IN THE SAME CATEGORIES REFERENCED EARLIER INCLUDING TOTAL SPENDING. TOTAL OUTPUT, PERSONAL INCOME, WAGE/SALARIES, RETAIL SALES AND PERMANENT JOB LOSS

OUR COMMUNITY MUST AND SHOULD AGGRESSIVELY INCREASE CONSERVATION, INCREASE NON-POTABLE USE OF TREATED WASTEWATER AND, AS NEEDED, ACQUIRE SUPPLEMENTAL SURFACE SOURCES. UNDER THE STATE LEGISLATION REFERENCED EARLIER, OUR COMMUNITY WILL IMPLEMENT THIS THREE-PRONG APPROACH AND BEAR THE COSTS FOR THESE APPROACHES, AS WE RIGHTFULLY SHOULD.

THE ECONOMIC DEVELOPMENT FOUNDATION IS CURRENTLY WORKING WITH SIXTY-SIX ACTIVE CORPORATE PROSPECTS WHO MUST BE REASSURED THAT THE ISSUES OF CONTROL AND COST OF WATER IN THIS REGION ARE BEING SETTLED. THE STATE LEGISLATION HAS GONE A LONG WAY TO ASSURE BUSINESSES THAT THEY WILL HAVE A DEPENDABLE SOURCE. WE REMAIN HOPEFUL THAT THE FEDERAL DISTRICT COURT WILL AGREE.

MANY OF THESE ARE MANUFACTURERS. CATEGORIES INCLUDE: METAL WORKING, INDUSTRIAL MACHINING, COMPUTER EQUIPMENT, ELECTRONIC EQUIPMENT AND FOOD PROCESSING. WATER IS AN

IMPORTANT RESOURCE IN THESE PROCESSES AND IS A KEY CRITERIA USED DURING THE SITE SELECTION.

WHETHER THE NORTH AMERICAN FREE TRADE AGREEMENT IS RATIFIED IMMEDIATELY OR NOT, SAN ANTONIO'S GROWING PARTNER TO THE SOUTH, MEXICO, WILL BE PROVIDING TREMENDOUS OPPORTUNITIES FOR BUSINESS DEVELOPMENT, INCLUDING FOOD PROCESSING. OUR COMMUNITY IS A MUCH BETTER LOCATION TO SERVE MEXICAN MARKETS WHICH WILL NEED TREMENDOUS AMOUNTS OF FOOD ITEMS, AND SAN ANTONIO HAS THE POTENTIAL FOR BECOMING A PROCESSING CENTER FOR MEXICAN AGRICULTURAL PRODUCTS GEARED FOR U. S. CONSUMPTION.

THE FOUNDATION URGES THIS COMMITTEE TO CONSIDER AMENDMENTS WHICH PROVIDE A PROPER BALANCE BETWEEN ANIMAL AND PLANT SPECIES AND PEOPLE, JOBS, AND QUALITY OF LIFE. A DEPENDABLE, PREDICTABLE WATER SUPPLY IS ESSENTIAL TO THIS REGION'S ECONOMIC FUTURE. IT IS OUR BELIEF THAT

AMENDMENTS TO THIS ACT, WHICH PROVIDE FOR THE CONSIDERATION OF INDIVIDUALS, COMMUNITIES AND THEIR LIVELIHOOD, ARE ESSENTIAL TO REFLECT THE NEEDS, DESIRES, ASPIRATIONS AND WELL-BEING OF THIS NATION.

THANK YOU FOR ALLOWING ME THE OPPORTUNITY TO REPRESENT THE SAN ANTONIO ECONOMIC DEVELOPMENT FOUNDATION AND PROVIDE THIS PROSPECTIVE TO MEMBERS OF THE COMMITTEE DURING REAUTHORIZATION HEARINGS ON THE ENDANGERED SPECIES ACT.

TESTIMONY OF DAVID K. LANGFORD

OF THE TEXAS WILDLIFE ASSOCIATION, 7/6/93

MR. CHAIRMAN & MEMBERS OF THE COMMITTEE -- MY NAME IS DAVID K. LANGFORD AND I THANK YOU FOR ALLOWING ME TO TESTIFY. I AM HERE REPRESENTING THE TEXAS WILDLIFE ASSOCIATION -- AND GUESS WHAT -- EVEN THOUGH WE'RE NOT FROM THE GOVERNMENT, WE'RE STILL HERE TO HELP.

TWA'S MEMBERSHIP IS COMPOSED PRIMARILY OF LANDOWNERS, EDUCATORS, BIOLOGISTS, AND RESEARCHERS WHOSE MAIN OBJECTIVES ARE THE CONSERVATION AND MANAGEMENT OF WILDLIFE HABITAT AND WILDLIFE RESOURCES. AND, OUR MEMBERSHIP CONTROLS MILLIONS AND MILLIONS OF ACRES OF THIS WILDLIFE HABITAT IN TEXAS.

WE FEEL THAT THE STATED PURPOSE AND THE INTENT OF THE ESA IS BEYOND REPROACH. HOWEVER, WE ARE DISTURBED BY THE WAY THE ACT IS CURRENTLY BEING IRRATIONALLY INTERPRETED AND SENSELESSLY ADMINISTERED -- AS WE HAVE ALREADY HEARD HERE TODAY. MY WRITTEN STATEMENTS WILL REVIEW MOST OF THESE CONCERNS -- SO I WILL DIRECT MY TESTIMONY TOWARD TWO PROBLEMS NOT USUALLY ADDRESSED.

THE FIRST AREA OF OUR DISMAY CENTERS AROUND MISCONCEPTIONS OF THE WORD "LANDOWNER." WE HAVE DISCOVERED IN ONGOING ESA DISCUSSIONS THAT THE LANDOWNER'S POINT OF VIEW IS REPRESENTED <u>ONLY</u> BY "DEVELOPER" INTERESTS.

REMEMBER THAT TWA REPRESENTS THE PRIVATE OWNERS OF MILLIONS OF ACRES OF WILDLIFE HABITAT. FURTHERMORE, OUR LANDOWNER-MEMBERS (BECAUSE OF LONG-ESTABLISHED TRADITIONS AND VALUES) HAVE NO DESIRE

TO BUILD APARTMENTS, GOLF COURSES, OR SHOPPING MALLS -- OR TO OVER-GRAZE, STRIP-MINE, OR DUMP TOXIC WASTE ON THEIR LAND. WE WANT TO KEEP OUR LAND AS IDEAL HABITAT FOR ALL SPECIES OF WILDLIFE -- AND LIVESTOCK -- AND PEOPLE. WE ARE NOT SUBDIVIDERS. WE ARE PROVIDERS OF WILDLIFE HABITAT. THERE'S A BIG DIFFERENCE BETWEEN THOSE POINTS OF VIEW -- AND OUR POSITION HAS GONE UNHEEDED UNTIL NOW.

THE SECOND SET OF DOUBTS SURROUNDING ESA CONSIDERATIONS LIES IN THE ABSOLUTE LACK OF ANY INCENTIVES TO REMAIN EXEMPLARY STEWARDS OF OUR LAND. AND, HERE AGAIN, WE ARE REFERRING TO A NON-TRADITIONAL DEFINITION OF "INCENTIVES." WE DO NOT IMPLY FEEDING AT THE GOVERNMENT TROUGH OR DIPPING HANDFULS OF GOVERNMENT PORK. LET ME EXPLAIN WHAT WE MEAN.

SUPPOSE OUR TWA MEMBERSHIP FERVENTLY DESIRES TO MANAGE FOR ENDANGERED SPECIES. THEIR EFFORTS WOULD NOT BE COUNTED -- EVEN IF THEY FOLLOWED A RECOVERY PLAN TO THE LETTER!

ASSUME, FOR EXAMPLE, THAT A TWA MEMBER IN TRAVIS COUNTY OFFERS TO ENTER INTO CONTRACT WITH THE U.S. FISH AND WILDLIFE SERVICE TO PROVIDE MANAGEMENT OF HIS 10,000 ACRES OF PRIME GOLDEN-CHEEKED WARBLER HABITAT, *IN PERPETUITY*, TO THE BENEFIT OF THE SPECIES. SINCE THE USFWS SAYS 41,000 ACRES ARE NEEDED IN THAT COUNTY -- AND WE'RE PROVIDING 10,000 ACRES -- ONLY 31,000 NOW NEED TO BE ACQUIRED. RIGHT? WRONG! PRIVATE EFFORTS ARE NOT RECOGNIZED AS PART OF THE EQUATION. SO, WHERE'S THE INCENTIVE TO HELP IF YOUR ACTIONS DON'T COUNT?

BY THE SAME TOKEN, BENEFICIAL PRIVATE ACTIVITIES ARE NOT PROTECTED FROM LEGAL DIFFICULTIES. IF THAT SAME TWA MEMBER SIGNS AN

AGREEMENT WITH THE USFWS TO MANAGE HIS LAND FOR HIMSELF AND FOR ENDANGERED SPECIES -- THERE IS STILL NOTHING TO PROTECT HIM FROM A LAWSUIT FROM SOME GROUP THAT DISAGREES WITH HIS ROTATIONAL GRAZING SYSTEM, HIS FENCING REPAIRS, OR THE COLOR OF HIS FRONT GATE. SO, IF MY ACTIONS DON'T "COUNT" TOWARD SPECIES RECOVERY, AND IF MY GOVERNMENT WON'T PROTECT ME FROM OUTSIDE SUITS STEMMING FROM THE FACT THAT I AM NOW IN THE PUBLIC EYE -- BECAUSE OF MY EFFORTS TO FOLLOW THEIR RECOMMENDATIONS -- AGAIN, WHERE IS THE INCENTIVE TO HELP?

IN CONCLUSION, LET ME SUMMARIZE OUR MAIN CONCERNS. ALL LANDOWNERS ARE NOT DEVELOPERS. SOME WANT TO DEDICATE THEIR LIVES TO CONSERVING WILDLIFE HABITAT. WHY NOT ACCEPT THEIR HELP? WHY NOT PROVIDE THEM WITH SOME NO-COST INCENTIVES -- LIKE COUNTING THEIR EFFORTS AND PROTECTING THEM FROM THE MANEUVERS OF FUND-RAISING ENTITIES.

THANK YOU. I'LL BE HAPPY TO ANSWER ANY QUESTIONS.

TESTIMONY FOR ENDANGERED SPECIES ACT HEARING

Congressman Laughlin and committee members, I am Angela Flores Beck, Chair of the Board of the Lower Colorado River Authority. Let me begin by saying that I appreciate the opportunity to appear before the Subcommittee on Natural Resources and the Environment to testify on the Endangered Species Act. The Act is one of the cornerstones of environmental law that seeks to protect the biological resources of this country. The Lower Colorado River Authority, or LCRA, is a regional entity whose mandate is to manage and protect the natural resources of its district. As such, we support the goals of the Act and have some direct experience that I would like to share with the Committee members today.

The Lower Colorado River Authority is an agency of the state created in 1934 to provide electricity, flood control and natural resource conservation. We serve over 800,000 customers in fifty counties with electricity, making us the eighth largest utility in the state. The sale of electricity and water provides revenues for our electric operations as well as supports our activities in water quality protection, soil conservation and recreation.

One might say our bifurcated mission as a regional authority presents divergent tensions. One the one hand, we are a utility that must construct and maintain power lines in a large geographic area within which we can find 4 plants and 23 animals which are on the endangered species list. We have, nevertheless, been proactive

in maintaining our goal of no "takes" by including endangered species considerations in planning our projects, which have included the surveying of over 14,000 acres and 450 miles of transmission lines.

On the other hand, our larger legislative mandate to manage and conserve the soil, water and wildlife within our district creates responsibilities that go beyond strict compliance with the Act. As a result, we have put enormous energies into the development of the Balcones Canyonlands Conservation Plan (BCCP) for Travis County because, in our role as a regional entity, we recognize the benefits of a regional, multi-species approach to the protection of species and ecosystems. Legislative recognition and validation of this approach would place a priority on it and move the Act toward better protection of the ecosystems the Act was designed to preserve. Simplification of the 10(a) permitting process to better mirror the Section 7 process would be helpful.

We at LCRA believe that the benefits of a regional approach go beyond habitat protection. Such an approach would, among other things, allow economic development to proceed, as well as enhance water quality protection, soil conservation and recreational opportunities.

Other suggestions, that from our experience, would strengthen the Act include:

One -- Additional resources for the U.S. Fish and Wildlife Service are needed to clear out the backlog of candidate species and recovery plans. This would allow the Service to focus resources on multi-species, regional plans that address not only endangered species but also those that are not yet listed. Without attending to this backlog, we will not get ahead of the extinction curve.

Secondly -- Better coordination among the federal, state and local agencies involved in the listing and recovery planning process is needed. Cooperative management agreements much like that envisioned by the BCCP are a vehicle to such coordination. Agreements like these could result in conservation measures that serve to prevent a species from becoming listed in the first place. In the BCCP, for instance, the inclusion of the Barton Springs salamander, which is not currently listed, has been discussed.

Lastly -- More involvement by those affected by the recovery planning process would be helpful. The concern most often raised by landowners to those of us out in the field is that information collected on endangered species will harm property values and/or the landowners' ability to use the land as needed. If we are to be successful in our goals of species and ecosystem protection, particularly in Texas where 95% of the land is privately owned, this concern must be addressed. Additional public involvement in this process would help.

I appreciate the opportunity to share LCRA's experiences with you today. We believe the Act and its goals are fundamentally sound. We think that the suggestions made today, if accepted, would improve it. We also want to emphasize that the Act, beyond habitat preservation, carries additional benefits, enhanced water quality protection and recreational opportunities being the most obvious. Thank you again for your attention.

P.O. Box 1440
San Antonio, Texas 78295-1440

STATEMENT OF
DAVID BRAUN
DIRECTOR, THE NATURE CONSERVANCY OF TEXAS
BEFORE THE HOUSE MERCHANT MARINE
AND FISHERIES COMMITTEE
JULY 6, 1993

Mr. Chairman and members of the Subcommittee, my name is David Braun, and I am Director of the Texas Chapter of The Nature Conservancy. I appreciate the opportunity to testify on the Endangered Species Act and specifically on the issues surrounding water withdrawal from the Edwards Aquifer.

The Nature Conservancy is an international non-profit, land conservation organization dedicated to the preservation of natural diversity through the protection of threatened species and ecosystems. Over the past 43 years, we have protected almost seven million acres of biologically significant land in the United States, and we manage a system of 1,600 privately owned nature preserves. Our membership includes more than 707,000 individuals nationwide and over 800 corporate associates, with over 22,000 members in the state of Texas alone.

In May 1991, the Conservancy launched its "Last Great Places" campaign, a new strategic approach to protecting biological diversity coupled with a $300 million private fund raising effort. We are now focusing our activities on the protection of large, functioning ecological systems called bioreserves, and have identified such sites in this country, Latin America and the Pacific. We are working on these projects in partnership with government, business, and local communities to develop strategies that blend human needs and economic growth with habitat protection.

The Texas Hill Country, which encompasses about 18,560 square miles in central and south-central Texas and is centered around the Edwards Aquifer ("Aquifer"), has been named as one of the 12 original Last Great Places. Protection of the Hill Country will not involve major land purchases, but rather recognizes that economic activity has been and will continue to be a part of the landscape processes of the region. The Conservancy feels that any effort to protect the Hill Country's tremendous biodiversity must incorporate current and future human use in the equation.

I would like to talk more specifically about the Edwards Aquifer and its biological significance in the Texas Hill Country, the numerous threats to the integrity of the Aquifer, and the Endangered Species Act as it relates to the Aquifer. I then will discuss some actions which can be taken to prevent further decline of the resource and the species which depend on it.

BIOLOGICAL SIGNIFICANCE OF THE EDWARDS AQUIFER

In preparing a strategic plan for the protection of the Texas Hill Country Bioreserve, five strategic goals for The Nature Conservancy were defined. Conserving groundwater resources was one of these long-term goals, as aquifers play a major biological role in the Hill Country by contributing springflow and baseflow to streams and rivers and providing habitat for aquifer-dwelling species. The San Antonio segment of the Edwards Aquifer was identified as the most significant groundwater resource from both an individual species and an ecosystem standpoint, supporting approximately 65 known, unique aquifer-dependent species. For this reason, it has been characterized as the most biologically diverse groundwater ecosystem in the world.

The Edwards Aquifer is biologically unique due to physical components formed during its geologic development. The Aquifer is a highly interconnected system that links together the Edwards Plateau, three river basins, and the Texas Gulf Coast. It is the central element in an extremely complex natural resource system comprised of five different components: an up-gradient catchment area made up of the watersheds of three river basins, a recharge zone, an underground reservoir, six major springs, and surface water streamflow.

The unique hydrological characteristics of the Edwards Aquifer system make it critical, both directly and indirectly, to the survival of a number of species. Thousands of wildlife species use the system but, more than 100 rare, threatened, and endangered species depend on the maintenance the natural processes and functions of the southern Edwards Aquifer system. I would like to describe for the Committee some of the various species dependent on each of the major components of the Aquifer.

- The upland watersheds contain woodland acreages which provide the exclusive nesting habitat for the federally endangered Golden-cheeked Warbler. The endangered Black-capped Vireo and two endangered plants also find habitat in these watersheds.

- There are several threatened species living in the Aquifer's recharge zone, including three species of salamanders and almost a dozen invertebrates. As research and inventory of species in this area has been very limited, it is likely that there are many more species which have yet to be documented.

- The Aquifer's underground reservoir zone appears to support the world's richest and most biologically complex subterranean aquatic community. More than 40 species have been identified there, including the Texas blind salamander. This salamander is the only existing artesian zone species in the country that is federally listed as endangered.

- The species of the southern Edwards Aquifer's karst springs have been the focus of most of the Endangered Species Act listings which affect water use in the area. Together, Comal and San Marcos Springs yield 90 to 95 percent of the Aquifer's natural discharge. They are also habitat for four federally endangered and one federally threatened species. Comal Springs harbors the endangered Fountain darter and the threatened San Marcos salamander, and San Marcos Springs harbors the endangered Texas wild rice, Texas blind salamander, Fountain darter, and San Marcos gambusia in addition to the threatened San Marcos salamander.

- The riverine and estuarine communities downstream of the Edwards Aquifer are also home to imperiled species such as the Whooping Crane and Cagle's map turtle. Other rare shorebirds and thousands of migratory waterfowl share the coastal habitat sustained by the freshwater and nutrients in the streamflow from the karst springs.

The biological communities dependent on the karst springs appear to have evolved in response to relatively narrow thermal, hydrologic, and water quality conditions, and share common requirements for thermally constant (21°-23° C), clear, and quietly flowing water. Most debate on the ecological requirements for karst spring species has focused on the volume of springflow needed for habitat maintenance. In May 1993, the U.S. Fish and Wildlife Service developed initial minimum springflow levels for the viability of the Fountain darter, the San Marcos salamander, the San Marcos gambusia, and the Texas blind salamander based on the point at which the species would experience harm or loss ("take"). Take determinations do not apply to plants, and minimum springflow requirements have therefore not been proposed for Texas wild rice, one of only two aquatic plants listed as endangered. Spring discharge volumes are not the only factors of concern, however, in maintaining the well-being of these species. Factors such as degradation of water quality and competition and predation by non-native species also adversely affect spring communities.

THREATS TO THE AQUIFER

The Edwards Aquifer is not only home to a number of threatened and endangered species; it also serves as the sole drinking water source to between 1.5 and 1.8 million humans living in the area. San Antonio is one of the fastest growing cities in the United States and, if the North American Free Trade Agreement is implemented, it will serve as a regional trade center site, adding additional demands on water for both drinking and industrial purposes. The Aquifer is also used extensively to irrigate some of Texas' richest

agricultural land. Because the Edwards Aquifer is currently the sole source water supply for most of the region, the prospect for future economic growth may be compromised if the sustained yield of the aquifer is exceeded and water supply alternatives, such as conservation, are not investigated and pursued.

In addition to the increased demand for water, many other activities are presently having a negative impact on the health of the Aquifer system. In the contributing watershed, changes in land cover need further study as to their effects on runoff and streamflow timing and volume. Also, degradation of water quality from erosion and sedimentation, pesticides, and wastewater effluent from treatment systems degrade water quality and adversely affect aquatic species. The Edwards Aquifer is particularly sensitive to contamination because it is a cavernous aquifer and hence does not filter or cleanse water.

The main threat to subterranean storage and spring discharge is overdrafting of groundwater for municipal use and agricultural irrigation. Non-point source pollution associated with urbanization and potential spills from petroleum products and hazardous materials are also threats to the Aquifer's biological communities. These same threats will, likewise, compromise the utility of the Aquifer for humans by reducing the availability of and contaminating the region's primary water source.

ENDANGERED SPECIES ACT

Some people in this region have chosen to view the Endangered Species Act as the fundamental culprit in causing the problems we are seeing in the Edwards Aquifer. I challenge this view, and offer the opposite opinion; namely, that the Endangered Species Act is not the problem with the Aquifer, but may well end up being the salvation of the Aquifer.

For the past 30 years, it has been evident that a coordinated plan is required to manage the Aquifer. Despite numerous studies of water supply alternatives and years of discussion, very little has actually been done to put a regional management plan in place. In reality, the Act is finally forcing all of us to address the water situation while there is still time to make fair and coherent planning decisions. If we had waited much longer, we would simply have had fewer and more costly options, and, if we had waited too long we would have had no options at all.

The Endangered Species Act is not to blame for the water problems of the Edwards Aquifer region, and should not be portrayed as such. This is not a question of people versus endangered species; <u>it is a question of people versus people.</u> If pumping keeps increasing, people in San Antonio will be taking water from people in San Marcos and New Braunfels who have invested in the recreation potential of the springs and who have come to expect the quality of life provided by the river that runs through their community. These recreation-based economies have evolved under the conditions which support the aquifer dependent species. Excess pumping jeopardizes both. I think that this is a more accurate depiction of the problem with which we must all deal.

For four decades, The Nature Conservancy has been bringing together creative minds in science, business, law, and government to develop and implement practical solutions to the biodiversity crisis. Based upon our experience, we believe that solutions can often be worked out that satisfy the species' needs and the economic needs of the region.

The Conservancy has found that the three pillars upon which the solution to protecting the country's endangered species must rest are good scientific information, coordinated management, and creative partnerships. The same is true for the human uses and wildlife species that depend on the Edwards Aquifer in central Texas.

First, the problem must be approached from a scientific perspective, determining the requirements for the ecosystem and species using the most accurate information available. Establishing a sound scientific foundation to determine the water needs for both endangered species and humans must be a top priority because it will provide flexibility in making decisions on how to allocate water from the Aquifer for human uses. Research is underway locally, much of which has benefitted from the Conservancy's involvement. The University of Texas at San Antonio under the sponsorship of regional water purveyors is developing a planning model, another important step in the right direction. When completed, the regional decision support system will provide a common basis for aquifer planning and management, a step that the Conservancy has supported and found to be essential in solving water conflicts in other locations.

Second, the protection of the Edwards Aquifer ecosystem should be coordinated across agencies, disciplines and programs. Third, creative partnerships should and must be formed within the local communities to deal with this problem and find a regional solution. Much of the controversy over the Endangered Species Act in this case stems from the fact that it is a federal program being imposed on a local problem. It is unfortunate that the Endangered Species Act has become the final backstop for a crisis caused by a lack of a comprehensive regional water policy, but perhaps it will be the agent that stimulates local leadership to deal with the real issue. The situation will be fully resolved only when those with vested interests (state and local government, local business, the local community, and private landowners), become committed to finding a creative solution which is sustainable in the long-term.

In that regard, the Conservancy recognizes that the Edwards Aquifer water problem is very similar to situations experienced with other western water resources. The Conservancy believes that state water law and free market initiatives should be strongly supported and relied on to resolve local water problems and disputes. Our experience with the Upper Colorado River Basin in Colorado and the Truckee and Carson Rivers in Nevada indicates that the new federal legislation does not need to be enacted to encourage and create an appropriate state framework for local water management and the Endangered Species Act does not need to be amended. In fact, federal involvement in water allocation in California's Central Valley may have discouraged local users from developing their own unique solutions to competing demands for water. While the Congress may wish to continue oversight of the

effect of the Endangered Species Act on the Edwards Aquifer, allocation of surface water and groundwater resources through state water law should be supported as the first choice approach to water management.

ACTIONS NEEDED TO PREVENT AQUIFER'S DECLINE

The Edwards Aquifer has long been regarded as having a limitless quantity of high-quality water for human economic use. We now know that this is not the case and that the supply **must** be used judiciously.

There needs to be a sustainable-use ethic associated with the Aquifer. Water withdrawal can and must be done so that both the long-term economic potential of the Aquifer system and its biological community are not compromised. State and local policy makers, water managers, and scientists must adopt a regional or ecosystem approach when making decisions that affect the Aquifer's physical components and biological elements.

Governor Ann Richards and the Texas Legislature and its leadership have expressed their support for state management of the Edwards Aquifer by enacting a Senate Bill, which became law on June 11, 1993. Among its purposes, this new state law establishes an allocation system to control the amount of water which can be pumped from the Aquifer. The new law has been enacted, and it is now up to everyone who depends on the Aquifer system to make it work to avoid reintervention of the federal court and federal law. As with any first-time law, opportunities to strengthen and improve state water management under Senate Bill 1477 exist; for example, ensuring that the new Edwards Aquifer Authority has sufficient short-run ability to protect springflow for endangered species during times of drought and promoting free market-based reallocation and retirement of water rights. Nevertheless, The Nature Conservancy feels that the state's action is an important initial step in the process of ensuring the future availability of water for the entire region.

CONCLUSION

The Nature Conservancy can contribute scientific knowledge to help determine water requirements for species, and hands-on experience with market-based water allocation that can help make local implementation of the new state law successful. We look forward to being part of the solution leading to equitable and environmentally sound to state and local management of the Edwards Aquifer system. The Conservancy believes that it is possible to find a solution which allows both endangered species **and** humans to win. I appreciate this opportunity to share the Conservancy's views, and would be pleased to answer any questions you may have.

THE IMPORTANCE OF THE U.S. ENDANGERED SPECIES ACT IN PROTECTING CENTRAL TEXAS SPECIES AND ECOSYSTEMS AND ASSURING MANAGEMENT THAT WILL PROVIDE FOR FUTURE GOOD QUALITY WATER FOR THE EDWARDS AQUIFER REGION

Presented at

U.S. CONGRESSIONAL FIELD HEARING ON THE ENDANGERED SPECIES ACT

H. B. Gonzalez Convention Center
San Antonio, Texas
July 6, 1993

by

Glenn Longley

Member
San Marcos Recovery Team
San Marcos, Texas

ABSTRACT: The Balcones Fault Zone Edwards Aquifer supports a diverse (> 40 species) assemblage of aquatic forms. Springs flowing from this aquifer support several additional species that are on or are proposed for listing on state and federal lists of protected species. These unique communities are in danger of being severely affected by man. The primary impact is from excessive pumping, which will dry some of the system and secondarily lead to water quality degradation from encroachment of highly saline water. Recent studies have shown the potential for water quality degradation.

The average recharge (1934-1990) to the San Antonio portion of this aquifer is 637,000 acre feet annually. Pumpage in 1989 was 542,400 acre feet. Aquifer levels now regularly drop at the rate of one foot a day during late spring and early summer. A short term drought in the region has shown how shorter duration and less intense droughts can cause much greater changes than were experienced during the drought of record (1947-1956). Texas S.B. 1477 has recently been passed that will establish a new management authority that will be empowered to protect springflow and thus the species at Comal and San Marcos Springs.

The worlds largest well was completed January 1991 in the artesian zone of this aquifer. This 30" diameter well flows an average of 43.2 MGD. The annualized flow from this well would equal 111% of the 1956 annual recharge (low year of record).

I support the strengthing of the Endangered Species Act to include protection of Ecoystems and thereby assist our government in providing for the fitness of our natural ecosystems.

KEY TERMS: Overpumping; subterranean aquatic ecosystem; Edwards Aquifer.

INTRODUCTION

The Balcones Fault Zone Edwards Aquifer located in South Central Texas parallels the Balcones Escarpment. It consists of massive Cretaceous limestone deposits averaging 400 - 500 feet thick. The San Antonio portion of the aquifer will be the focus of this paper. Since 1975 there has been intensive sampling of this aquifer. The sampling of wells and springs has led to increased understanding of the diverse community of subterranean aquatic forms that live in the aquifer (Longley, 1981). More than 40 species of troglobitic forms live in the aquifer (Table 1). Other species that live in springs that are supplied from this aquifer are protected (Table 2) or have been proposed for protection .

TABLE 1. The described taxa of the Edwards Aquifer (Longley, 1986) with recent name changes: some poorly known taxa excluded.

Scientific Name	Legal Status* U. S. TX
Invertebrates	
TURBELLARIA: Kenkiidae	
Sphalloplana mohri Hyman	
GASTROPODA: Hydrobiidae	
Phreatodrobia micra (Pilsbry & Ferris)	
P. nugax nugax (Pilsbry & Ferris)	
P. nugax inclinata Hershler & Longley	
P. rotunda Hershler & Longley	
P. conica Hershler & Longley	
P. plana Hershler & Longley	
P. imitata Hershler & Longley	C2
P. punctata Hershler & Longley	
P. coronae Hershler & Longley	
Phreatoceras taylori Hershler & Longley	
Balconorbis uvaldensis Hershler & Longley	
Stygopyrgus bartonensis Hershler & Longley	
OSTRACODA: Entocytheridae	
Sphaeromicola moria Hart	
ISOPODA: Cirolanidae	
Cirolanides texensis Benedict	
Asellidae	
Lirceolus smithi (Ulrich)	
Texas Troglobitic Water Slater	
L. pilus (Steeves)	
Caecidothea reddelli (Steeves)	
AMPHIPODA: Crangonyctidae	
Stygobromus flagellatus (Benedict)	C2
S. russelli (Holsinger)	C2
S. pecki (Holsinger)	C2
S. balconis (Hubricht)	C2
S. bifurcatus (Holsinger)	C2
Hadziidae	
Texiweckelia texensis (Holsinger)	
Texiweckeliopsis insolita (Holsinger)	
Holsingerius samacos (Holsinger)	
Allotexiweckelia hirsuta Holsinger	

TABLE 1. Continued.

Scientific Name Common Name	Legal Status* U. S. TX
Bogidiellidae	
Parabogidiella americana Holsinger	
Artesia subterranea Holsinger	
Sebidae	
Seborgia relicta Holsinger	
THERMOSBAENACEA: Monodellidae	
Monodella texana Maguire	
DECAPODA: Palaemonidae	
Palaemonetes antrorum Benedict	C2
P. holthuisi Strenth	
COLEOPTERA: Dytiscidae	
Haideoporus texanus Young & Longley	C2
Edwards Aquifer Water Beetle	
Vertebrates	
PISCES: Ictaluridae	
Satan eurystomus Hubbs & Bailey	C2 T
Widemouth Blindcat	
Trogloglanis pattersoni Eigenmann	C2 T
Toothless Blindcat	
CAUDATA: Ambystomidae	
Typhlolmolge rathbuni Stejneger	E E
Texas Blind Salamander	
T. robusta Longley	C2 E
Blanco Blind Salamander	

* Categories assigned by Federal and State agencies: C2 = Federal listing for consideration, but with insufficient information to make a determination; T = Threatened listing; E = Endangered

TABLE 2. The described taxa of the Springs (U.S.F.W., 1985) that have been given protection.

Scientific Name	Legal Status* U. S. TX
Vertebrates	
PISCES: Poiciliidae	
Gambusia georgei Hubbs & Peden	E
	E
San Marcos Gambusia	
Percidae	
Etheostoma fonticola Jordan & Gilbert	E
	E
Fountain Darter	
CAUDATA: Plethodontidae	
Eurycea nana	T
	P**
Plants	
Gramineae	
Zizania texana Silveus	E
	E
Texas Wild Rice	

* Categories assigned by Federal and State agencies: C2 = Federal listing for consideration, but with insufficient information to make a determination; T = Threatened listing; E = Endangered; P = Protected Nongame

Included in this assemblage are the two species of blind catfish known only from wells that have their water source between 1,350 and 2,000 feet below the ground in the San Antonio area (Longley and Karnei,1979a, b, Cooper and Longley 1980a, b). In addition to those species listed in Table 1 there are several other aquifer organisms that need taxonomic descriptions.

The uniqueness of this community is exemplified by the Texas Blind Salamander found only in the aquifer in a limited area around San Marcos (Longley, 1978). This highly adapted form was the first species to be placed on the Federal Endangered Species List. It is the most highly adapted amphibian for a troglobitic existence. Many of the species found in the aquifer are limited to it. The two most diverse taxonomic groups in the aquifer are the Hydrobiid snails (Hershler and Longley, 1986a, b, 1987) and the Amphipoda (Holsinger and Longley, 1980). Several other crustacean groups from this aquifer have been described (Bowman and Longley, 1976; Stock and Longley, 1981; and Strenth and Longley, 1990). The paleozoogeographic implications of the biota in this aquifer were discussed in a 1986 paper (Longley, 1986). Several of the forms in this

aquifer have marine affinities. The only completely aquatic, subterranean beetle from the western hemisphere is found in this aquifer (Young and Longley, 1976 and Longley and Spangler, 1977).

Studies show that poor quality, highly saline water is adjacent to excellent quality water in the main artesian portion of the aquifer (Longley, 1986 and Hoyt, 1990). The potential for the encroachment of this poor quality water into areas now occupied by high quality water is due to the increasing demands for water and the lack of a management plan for pumping from the aquifer. A geologically similar but hydrologically separate unit of the fault zone Edwards Aquifer has shown some lowered water quality due to saline encroachment during periods of drawdown (Slade, Dorsey and Stewart, 1986). Since this unit of Edwards Aquifer (Barton Springs segment) is much smaller, but still similar in numerous characteristics, it is logical to assume that occurrences of "bad-water movement" could indicate what the future may hold for the larger San Antonio segment being discussed in this paper. Numerous perspectives regarding aquifer use were represented in a 1983 symposium (Longley and Lukens, 1983). This meeting clearly showed how diverse government entities view aquifer use.

DISCUSSION

The unique aquatic ecosystem that is associated with this aquifer is threatened by the potential for overdrafting the aquifer. The average annual recharge to the aquifer for the period (1934-1990) is 636.7 thousand acre feet per year (Edwards Underground Water District, 1991). The median annual recharge for the same period is 556 thousand acre feet. The recharge is highly variable and directly related to amount of rainfall in the region (Longley, 1991). The minimum annual recharge for the period of record (1934-1990) was 43.7 thousand acre feet in 1956 and the maximum was slightly more than 2 million acre feet in 1987. Pumpage is directly related to the amount of rainfall in the region. When the rains increase, pumping for irrigation and lawn irrigation decreases. During dry periods the pumping increases dramatically. In the spring and summer of 1989 aquifer levels decreased more than a foot per day in a San Antonio Index well (J-17). This well is monitored continuously and the level has varied from 612.5 feet MSL on August 17, 1956, to a historic high of 699.2 feet MSL on June 17, 1987 (Fig. 1). During the spring and summer of 1989 aquifer levels, measured in Well J-17, dropped more than one foot a day during rapid drawdown.

It is interesting to compare the recharge of two 10 year periods (1947-1956) historic drought of record and (1980-1989) recent record high period of recharge. Recharge for the first period totaled 2.29 million acre feet. Recharge for the latter period was 7.63 million acre feet. One year of the latter period, 1987, had a recharge of slightly more than 2 million acre feet. In 1989 Bexar County (San Antonio metropolitan area) pumped more than 293 thousand acre feet. Pumping in the western, agricultural counties totaled 207. 29 thousand acre feet. Bexar County pumped 54% of all aquifer water pumped in 1989. Total pumpage for

the San Antonio region of the aquifer was slightly more than 542,000 acre feet in 1989. This amount is only 27,500 acre feet less than the recharge for 1988 and 1989 together. With greater understanding of the random nature of drought occurrences there should be development of effective short term regulations and plans for long term risk-based management alternatives.

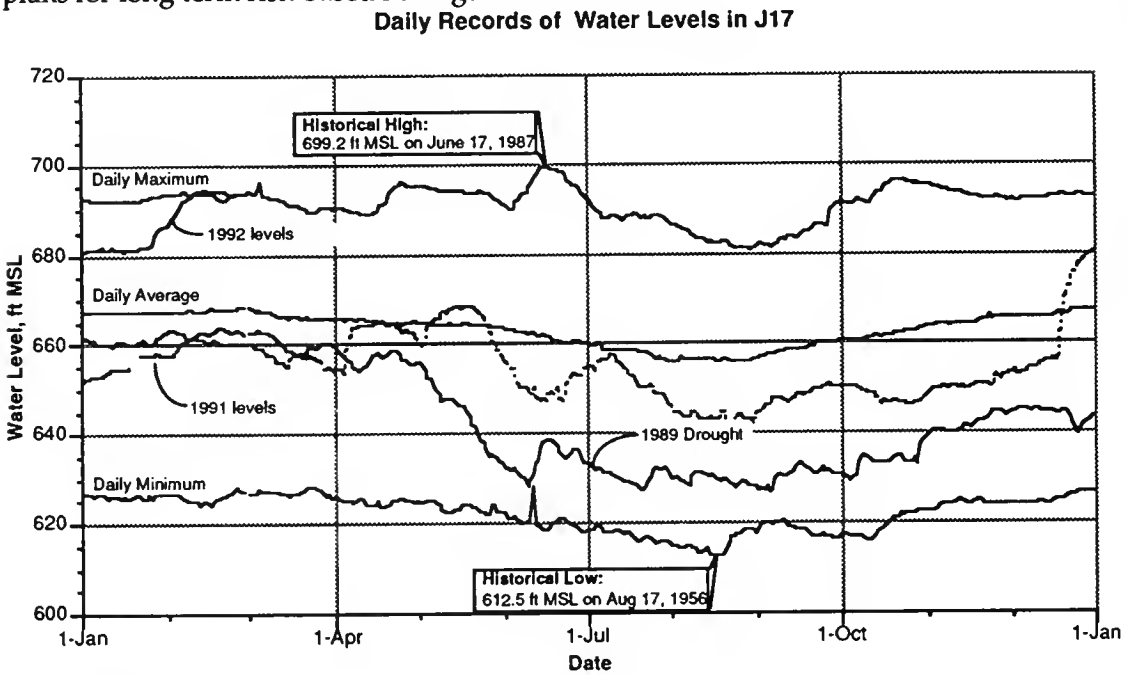

Figure 1. Daily records of water levels in J-17 (San Antonio Index Well).

A lawsuit to resolve the management issue was held in United States District Court in Midland, Texas. It was based on the presence of endangered species in the springs that are fed by the aquifer (Sierra Club and Guadalupe-Blanco River Authority, Et Al. vs. Manuel Lujan, Jr. Et Al.). This suit was an effort to protect the endangered species in the spring runs of two major springs from the aquifer by insuring adequate springflow. Federal Judge Lucius Bunton found that springflow from Comal and San Marcos Springs must be protected, even during a drought of record, in order to protect the endangered species that live in the springs. His interim order established temporary flow rates of 100 cubic feet per second (cfs). The U.S. Fish and Wildlife Service recently agreed to levels of springflow necessary to protect the species in the two springs. In the recent session the Texas Legislature S.B. No. 1477 passed, which does much to establish management for the aquifer and provide the basis for protection of springflow and therefore the species that have been provided protection by the U.S. Endangered Species Act. Had it not been for this act, we would still not have management for this vital resource. Passage of this bill would not have occurred without the threat of federal intervention.

During January 1991 a threat to the system involved the drilling and flowing of the "largest well in the world" (Swanson, 1991). This well contains a 30-inch casing and is 1600 feet deep, capable of producing in the range of 27,000 - 35,000 gpm (Cartwright, 1991). If this well (flowing under artesian pressure) were allowed to flow continuously at full capacity it would flow an estimated 43.2 MGD. The amount is approximately equal to 25 percent of what the City of San Antonio uses. This amount is equal to 111 percent of the 1956 annual recharge to the aquifer (low year of record). The owner is now requesting a permit from the Texas Water Commission to discharge (and therefore flow) an average of 55.3 MGD or slightly more than 62,000 acre feet per year. For perspective the 1956 recharge to the Edwards Aquifer was 43,700 acre feet. This activity serves to illustrate the problem on not having management.

A major concern for the region is what would be the effect of lowering the aquifer below historic minimum levels of 1956. The U.S. Geological Survey (Pavlicek, Small and Rettman, 1987) and the Edwards Underground Water District (Hoyt, 1990) have conducted studies in San Antonio, New Braunfels and San Marcos to better understand the potential for movement of "Bad Water" (having more than 1000 mg/l total dissolved solids) into the the higher quality portion of the artesian zone. The Edwards Underground Water District (EUWD) has continued its bad-water line studies, just completing a third well in the San Marcos area. This well, located less than 100 yards from major San Marcos Springs, was highly saline (Conductivity > 13,000 μmho's) at all depths sampled through the Edwards Formation (discussions with geologists conducting the studies for the EUWD and analysis of personal samples).

CONCLUSIONS

Unless groundwater controls are imposed and are enforced in such a manner as to hold the aquifer levels above historic low levels there will be the potential for destruction of unique, highly diverse groundwater and spring ecosystems by the encroachment of poor quality water or dewatering of some areas where organisms live. It is in the best interest of the region environmentally and economically to manage the water resources of the region conjunctively. If "bad water" contaminates good water of the aquifer it will be the small cities and individual land owners that will suffer most. One must consider that if a company applied to inject water, having the quality of that in the "Bad Water Zone", into the good Edwards the state would not allow it. It should not be allowed to happen because of inadequate management. Companies will not want to locate in an area that does not have an assurred supply of good quality water. It will be in the economic best interest of San Antonio and the rest of the region to look for additional ways to supply water for the regions needs. These ways will include conservation, reuse, water markets and alternative sources. The mechanism that provided to necessary stimulus for doing something that was essential to the well being of the regions future was the presence of the U.S. Endangered Species Act.

I am not hesitant to request the continuation of this important Act for the preservation of biodiversity. I would think that if modification is necessary it should be in the area of inclusion of entire ecosystems in the protective language. Our government should be bound by an ecological version of the Hippocratic oath, to take no action that knowingly endangers biodiversity. This responsibility should be no less important than that to public health or national defense. The preservation of species for the future generations is beyond the capacity of individuals or powerful private institutions. Biodiversity should be considered an irreplaceable public resource. It is not within our capacity to understand the value of this resource until we better know its extent and how it contributes to the fitness (ecological well being) of our natural world.

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June 28, 1993

TESTIMONY

I am Joe M. Cullinan, a REALTOR broker and am testifying on behalf of the Texas Association of REALTORS. I am a farm and ranch specialist with twenty years experience in that field.

The Endangered Species Act as currently interpreted and enforced by Federal authorities has caused, is causing and will continue to cause consternation in the real estate industry, especially in that portion of the industry involved with rural property sales and management. The specter of having a property, an area, or a county designated as "habitat" of endangered species or the designation of a "species" as endangered on any land is enough to effectively diminish the owner's individual property rights as we have known and recognized those rights since the founding of our nation. The matter is compounded in its gravity when such findings of "species" and "habitat" are based on faulty science with little or no public notice or opportunity for public input.

What is the effect of such "designation" on the property owner, a

prospective buyer of the property, the lending institution, the community? The property owner finds he no longer has all the options for full use of his property - to build a fence or barn where he chooses, to clear land for cultivation, to chop wood for his fireplace or to arrange adequate working capital for his agricultural endeavor due to diminished property value. The prospective buyer of land is inhibited due to reduction or restriction of normally enjoyed property rights usually accompanying such land purchase and either turns away from the land or offers substantially less than the market value of the land were the "designation" not in place. The lending institution, as most prudent institutions would, would substantially reduce the amount they would lend on the land due to the uncertainty of the value of the land were they to acquire it on default. And the community would suffer due to diminished property value effecting their bonding base and reduction of taxes obtained from the property, not to mention the financial benefit from the circulation of funds generated by a thriving enterprise in the community.

The Endangered Species Act is being invoked by environmentalists to establish case law throughout the country. We are experiencing such in the case of the Edwards Aquifer and the snail darter, et al. This sequence prompts state legislation or local mandates that are hastily devised and very often based on poor, little or no viable and corroborative science.

The real estate industry supports and endorses the spirit and intent of the Endangered Species Act. Our industry objects to the methods by which the Act is implemented and the contorted manner in which the Act is interpreted. This is the only law in which illegally obtained evidence can be used against a landowner who advertently or inadvertently violates the "taking" provisions of the Act.

The Law is broken. The listing of species, subspecies and population s ients is ill-defined, unscientific, ambiguous, frought with loopholes that can be and is used by individuals and organizations to further their personal agenda; the current list contains species, etc. that can never be saved; the cost of implementing the law as currently interpreted and for the species listed to be protected is beyond the capacity of the Fish & Wildlife Service as well as the Department of the Interior - and the citizen taxpayer; the financial impact on the community (city, county, state) is ignored and can result in devastating loss to the citizens of that community; and the individual property owner and entrepreneur can be wiped out.

The opportunity for this Law to be brought into proper United States of America perspective as to intent, implementation, socio-economic impact, a. preservation of personal property rights is now. We support public notification, owner notification, and the right to own and sell property under the Constitution. Congress can do the citizens of this nation

a great service by modifying otherwise well-intentioned legislation in such manner as to encourage individuals, industry and government to work harmoniously for the preservation of our environment without undue sacrifice by any sector be it individual, industry or government.

Jack M. Cullman AFLM

News from Texas Congressman Jack Fields

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TUESDAY, JULY 6, 1993 CONTACT: HARRY BURROUGHS
FOR IMMEDIATE RELEASE

FIELDS REPEATS CALL FOR REFORMS TO ENDANGERED SPECIES ACT

SAN ANTONIO - Saying that unless the federal Endangered Species Act (ESA) is reformed, Texas farmers, ranchers and other private property owners may have to be added to the list of endangered species, U.S. Rep. Jack Fields has repeated his call for reforms to the federal Endangered Species Act.

Fields, the ranking Republican member of the House Merchant Marine and Fisheries Committee, which has sole jurisdiction over the Endangered Species Act, earlier this year introduced comprehensive legislation reforming the Act to better protect private property rights and ensure that economic considerations are taken into account when determining how to protect an threatened species of plant or animal.

Fields called for reforming the Act at a congressional field hearing held Tuesday in the Centro Room of the Henry B. Gonzalez Convention Center in San Antonio. Another field hearing was held earlier in the day on the campus of Southwest Texas State University in San Marcos.

Among those testifying before the field hearing were San Antonio Mayor Nelson Wolff, Texas Agriculture Commissioner Rick Perry, John Hall of the Texas Water Commission, and former San Antonio Congressman Tom Loeffler.

Merchant Marine and Fisheries Committee members joining Fields at the hearing were U.S. Reps. Greg Laughlin and Henry Bonilla.

Fields complained that the Act, as currently written, is being used to halt economic development and to abuse the rights of private property owners in Texas. He has complained that the ESA may deny farmers, ranchers and other Texans who depend on the Edwards Aquifer from obtaining the water they need for their crops, their livestock and their own survival -- and could be particularly devastating for the greater San Antonio area. He added that in many instances, the ESA has abridged the private property rights of individual citizens -- preventing them from using their land as they wish.

"Congress not only has an obligation to protect 'endangered' or 'threatened' species, it has has obligation to protect the property rights of farmers, ranchers, and other citizens who depend on their land for their economic well-being," Fields said. "We can have a strong Endangered Species Act without forcing hard-working Americans to wonder whether or not they will have access to enough water or whether or not they will be permitted to use their own property."

As enacted into law, the 1973 Endangered Species Act requires the federal government to determine whether a species is "endangered" or "threatened," and to publish a list of such species. Once every five years, the list is reviewed, and a decision is made whether or not the status of any species should be changed -- requiring it to be added to, or delcted from, the list.

There are currently 728 species of plants and animals listed as "threatened" or "endangered," with another 4,000 species being considered for inclusion. In the 20 years since the Act was passed, only one species has ever been taken off the list -- despite the fact that billions of taxpayer dollars have been spent on conservation efforts.

"When bureaucrats in Washington set out to determine whether or not a species is 'endangered,' they pour over exhaustive biological data -- but they spend virtually no time considering how their decision might affect the private property rights of individuals, or the economic well-being of affected communities," Fields said. "We've got to institute reforms that give at least as much weight to human needs as are given to animals' needs."

Specifically, under Fields' ESA reform bill:

-more-

SAN ANTONIO FIELD HEARING
ADD ONE

• The public would be given an expanded opportunity to comment during the listing and recovery process. The bill would require public participation and would mandate that public hearings be held in each affected county during the development of recovery plans.
• All recovery plans would be required to be designed in such a way as to minimize conflicts between species preservation and economic development.
• An economic assessment of each recovery plan would be required so that the U.S. Fish and Wildlife Service would know the plan's cost to the public, the plan's impact on employment, and its effects on the use and value of private property.
• The secretary of the interior would be required to respond, within 90 days, to citizens' inquiries about whether or not particular activities on their land would cause injury to a threatened or endangered species on their property.
• The secretary of the interior would be empowered to issue grants to fund captive propagation programs. There is no reason that thousands of fountain darters could not be raised, and then released into the wild, through programs like Texas' Turtle Head Start program.
• Citizens would be required to be compensated for the loss of the economic value of their property; persons whose property rights were denied would have the right to petition the secretary of the interior for compensation. This provision recognizes that compensation for the federal taking of land has always been, and remains, an integral component of the Constitution.

While the measure is similar to legislation the congressman introduced last year, Fields said the need for his legislation is more urgent following U.S. District Court Judge Lucius Bunton's Feb. 1 ruling that the Endangered Species Act requires water flows at the Comal and San Marcos springs be maintained, even during a drought, in order to preserve the one-inch fountain darter.

Fields has worried that severe water restrictions on San Antonio could have devastating economic consequences for the area.

"In the event of a severe drought, the 1.5 million citizens of San Antonio, the nation's ninth-largest city, and citizens in other communities that rely on the Edwards Aquifer, could be faced with a 68 percent reduction in their drinking water supplies -- in order to protect the fountain darter. The economic consequences for San Antonio alone would include a $5.2 billion annual reduction in economic output; a $3.3 billion reduction in annual income; a $2.6 billion reduction in wages and salaries; a $1.3 billion reduction in retail sales; and a permanent loss of more than 136,000 jobs. Other communities that depend on the Edwards Aquifer would suffer similar economic losses," Fields has said.

"That decision threatens the economic future of San Antonio, Bexar County, and communities in six adjacent jurisdictions that depend on the Edwards Aquifer for drinking water," Fields said. "We have to restore some balance to the Endangered Species Act, and that's what my bill is designed to do."

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SAN MARCOS GAMBUSIA

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Taxonomy:
Gambusia georgei Hubbs and Peden
Family Poeciliidae (topminnow or livebearer family)

Type locality:

San Marcos River at hwy I-35 bridge, Hays Co., TX (1969)

Description:

Gambusia georgei is the most morphologically distinct gambusia and it not considered to be closely related to any other species. San Marcos gambusia present a unique appearance in having strongly cross-hatched by dark pigmentation on the margin of the scale pockets. Also, pigments near the base of the dorsal fin often are concentrated into a row of spots. A diffuse lateral stripe extends from pectoral fin to near the base of the caudal fin, and dark pigment stripes are present on the outer edges of the doral fins. In addition, the pelvic fins of wild caught specimens often are lemon yellow and can be quite bright in dominant males.

Distribution and Habitat:

The San Marcos gambusia has the most restrictive range of any known species of gambusia. It is endemic to a 2 km reach of the San Marcos River between Rio Vista Dam and 0.5 km below I-35 bridge, but was recorded historically from San Marcos Spring. Gambusia georgei appears to be the most ecologically distinct gambusia species. They prefer rapid-flowing, mud-bottomed, mid-water habitats having dense vegetation and shade. In addition, they require a constant water tempertaure (21-23 °C). Other species of gambusia prefer slow-moving, shallow areas near shore. Very few suitable habitats are available for this species in the San Marcos River.

Biology:

Little is known about the basic biology of the San Marcos gambusia. Reproductive biology is not known, but other species of gambusia are livebearers that give "birth" to young. Fertilization in other gambusia is internal, and the feamle carries the ova (eggs) internally until they hatch. Limited hybridization between the San Marcos gambusia and a related species, Gambusia affinis, apparently can occur, but only infrequently (usually less than 10%). Foods habits also are

FOUNTAIN DARTER

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Taxonomy:

Etheostoma fonticola (Jordan and Gilbert)
Family Percidae (perch family)

Type locality:

San Marcos River, just below mouth of Blanco River, Hays Co., TX (1886)

Description:

The color of fountain darters is mostly reddish-brown and the scales on the sides are broadly margined behind with dusky pigment. The dorsal area is dusted with fine pigment specks and usually eight indistinct dusky cross-blotches also are present. The sides are marked by thin dark lines with an interrupted lateral streak. Three small dark spots are present on the base of the tail in addition to a dark spot on the opercle. Small dark bars are present in front of, behind, and below the eye. The dorsal fin is jet black with a broad red band near outer edge.

Distribution and Habitat:

Fountain darters are known only from San Marcos River at San Marcos and Comal Springs. The population at Comal Springs were reintroduced from San Marcos Stocks after extirpation of the the species following a drought in 1954. Fountain daters inhabit areas where vegetation grows close to the substrate and water is clear and thermally constant (21-23 C). Preferred vegetation appears to be Rhizoclonium sp. (filamentlous algae), Hydrilla sp. (Florida elodea), and Ludwigia sp. (water primrose). Young fish prefer areas where flow is negligible, but adults can inhabit portions of the spring where flow is more rapid. The population of fountain darters in the San Marcos River was estimated to be around 103,000 in 1976.

Biology:

The reproductive biology of fountain darters is fairly well known. Spawning occurs nearly year round with peaks in August and late winter-early spring. Ova are spawned on filamentous algae or similar vegetation. No parental care is given to spawned ova. Fecundity is low (average 19 eggs/fish), and examination of 579 adult darters showed a sex ratio of 1.39:1.00 (M:F). Mature fountain darters demonstrate considerable sexual

San Marcos Salamander and Texas Blind Salamander

Information Sheet

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Taxonomy: The taxonomic status of these two species is straightforward and has been so since the original description of Eurycea nana by Bishop (1941) and Typhlomolge rathbuni by Stejneger (1896).

Distribution: The San Marcos Salamander (Eurycea nana) is endemic to the springfed headwaters of the San Marcos River (Spring Lake) to a few meters downstream of the Spring Lake dam. The Texas Blind Salamander (Typhlomolge rathbuni) is endemic to the San Marcos Pool of the Edwards Aquifer, and has been found only in a handful of caves and wells in San Marcos. It probably occurs in a 6.4 km wide zone, west of the "bad water" line, between San Marcos and a point 16 km south of Kyle.

Habitat: Eurycea nana is an epigean (= surface dwelling) animal and occurs throughout Spring Lake, living in mats of algae, among other submergent vegetation, and under rocks and in crevices along the substrate. Typhlomolge rathbuni is subterranean, and does not naturally occur in surface waters.

Ecology: Both Eurycea nana and Typhlomolge rathbuni are obligately aquatic throughout their life cycles. Both species depend upon pristine, well-oxygenated and thermally constant water for their survival. E. nana has well-developed eyes, is a relatively good swimmer, and actively forages for a number of aquatic invertebrates such as amphipods for food. T. rathbuni is a poor swimmer and forages for similar food in still water and by climbing along subterranean surfaces. Prey is detected by vibrations and consequent localized changes in water pressure. E. nana is preyed upon by a wide variety of native and exotic aquatic predators including fish and crayfish. T. rathbuni has no known natural predators, but individuals forced to the surface by wells and deposited in Spring Lake and elsewhere are helpless before the same predators. Both species lay eggs and, given the constant nature of their environments, breed year-round.

TEXAS WILD-RICE (*Zizania texana*): A Brief Overview

Jackie M. Poole

June 29, 1993

Introduction: Texas wildrice (*Zizania texana*), an aquatic perennial grass, was once common in the San Marcos River. However over the last 20 years the population of Texas wildrice has deteriorated dramatically. Currently Texas wildrice is restricted to the San Marcos River above the confluence with the Blanco River. Successful sexual reproduction (viable seeds, established seedlings, and second generation sexual reproductives) has not been verified within the natural habitat. This and other factors have contributed to the species' precipitous decline.

Taxonomy: Texas wildrice was first collected by G. C. Neally in August 1892, and was originally identified as *Z. aquatica* (U.S. National Herbarium sheet 979361). The next collection was by Ena A. Allen on July 10, 1921 (U.S. National Herbarium sheet 1611456). This sheet was labelled as *Z. texana*, apparently by A. S. Hitchcock some time after its collection. W. A. Silveus, an attorney and amateur botanist from San Antonio, first recognized Texas wildrice as a distinct species. The type collection (W.A. Silveus 518, both the holotype and isotype are housed at the U.S. National Herbarium) was probably made on April 3, 1932. Silveus sent the specimen along with a letter to Agnes Chase of the U.S. National Herbarium on April 4, 1932. The plant was formally described and named as *Z. texana* by Hitchcock (1933). All specimens were collected from the San Marcos River. (The above information was taken from Terrell et al.1978).

In a monographic work on the genus *Zizania*, W.G. Dore (1969) labelled *Z. texana* a "dubious species". Dore felt that Texas wildrice was most closely related to *Z. aquatica* var. *aquatica*. He attributed the "perennial" nature of Texas wildrice to the "constant year-round temperature of the artesian waters in which it grows", and the prostrate habit to the force of the current. Dore felt that the distinction of *Z. texana* from *Z. aquatica* would require careful field appraisal.

Dore also noted that collectors might mistake the rhizomes of *Zizaniopsis miliacea* for the underground structures of *Zizania texana*, as Dore was sent the former when requesting material of the latter (Terrell et al. 1978). However these two genera are different in several reproductive and vegetative characters, and are easily distinguishable.

Terrell et al. (1978) compared the three American taxa of *Zizania*, and determined that *Z. texana* was a "good" species, distinguishable from the other species in several characters.

americana, Sagittaria platyphylla, Hydrilla verticillata, Ceratophyllum demersum, Egeria densa, and Ludwigia repens (Terrell et al. 1978, Vaughan 1986). In the lower portion of the river, Texas wildrice is most often found in isolated clumps (Terrell et al. 1978, Vaughan 1986). Colocasia esculenta has invaded the river edge, and is narrowing the river and crowding the other aquatic species in many places. Common tree species which shade the river, sometimes possibly to the exclusion of Texas wildrice, include Platanus occidentalis, Carya illinoensis, Populus deltoides, Celtis laevigata, Taxodium distichum, Salix nigra, Ulmus americana, Sapium sebiferum, and Quercus fusiformis (Vaughan 1986).

Past and Present Distribution: When first described, Texas wildrice was abundant in the San Marcos River, including Spring Lake and its irrigation waterways (Terrell et al. 1978). By 1967 Emery found only one plant in Spring Lake, none in the uppermost 0.8 km of the San Marcos River, only scattered plants in the lower 2.4 km, and none below this (Emery 1967). Beatty (1975) reported a coverage of approximately 2580 square feet (240 square meters). However the survey methodology Beatty used is not known. In 1976 Emery again checked the abundance (Emery 1977). He found no plants in Spring Lake. Using a floating frame one meter square to measure the area of vegetative dominance, he calculated 1131 square meters of Texas wildrice in the San Marcos River, primarily concentrated in the extreme upper and lower segments. Subsequent data were gathered by Vaughan (1986) for several years using Emery's measuring technique. The overall areal coverage in 1986 was 454 square meters, less than half Emery's 1976 figure. Poole (1992) measured areal coverage of 1005.32 square meters in June 1989, 1380.31 square meters in June 1990, and 1406.21 square meters in 1991. Hernandez (1992) measured 1612.65 square meters in summer 1992. In 1989 Emery's methodology was employed for the first few plants, but was abandoned due to technical difficulties. From that point forward length and width were measured on the remaining plants, and % coverage was estimated within the resulting rectangle. Areal cover was equal to L x W x % cover. Since 1989 plants have been located in the uppermost part of the San Marcos River just below Spring Lake dam where neither Emery nor Vaughan had reported any Texas wildrice. Although the overall trend is inching upward, areal coverage of Texas wildrice has decreased in some segments of the river.

Impacts and Threats: Numerous factors have had serious impact on Texas wildrice. Emery (1967) mentioned four factors which he felt had contributed significantly to the Texas wildrice's decline. These were 1) floating debris from the regular mowing of aquatic vegetation in Spring Lake knocking down inflorescences and thus preventing sexual reproduction, 2) plowing of the river bottom by the city for recreational use, 3) replacement of native aquatic vegetation with aquarium plants for private commercial purposes, and 4) pollution from accidental discharge of untreated sewage. By 1977 Emery felt that the impact from these factors had significantly abated. However he noted that neither had sexual

than 120 cm). Soil type (either Crawford silt clay from the banks of the river or Quaternary limestone sediment from the river bottom) had no significant effect on growth rate or survivorship. However moisture regime led to dramatic results. Mortality was 100% in both the dry and the moist regime. Plants grown in 20 cm of water or more were significantly larger than those grown in 20 cm or less. Thus both water depth and amount of light are significant in the growth of Texas wildrice.

Fonteyn and Power (no date) began cultivating Texas wildrice in the raceways at Southwest Texas State University as a seedbank and nursery for future experimental material in 1986. Plants have been continually cultivated by Power in the raceways since that time. In spring 1987 Fonteyn and Power began a series of transplanting experiments to test the effect of competition by Colocasia on Texas wildrice. Colocasia was removed from selected sites along the river, and small Texas wildrice plants were transplanted. Only one of 424 plants placed in the river survived to reproductive stage only to be eaten probably by a nutria. Results from a reciprocal transplant experiment where Texas wildrice seedlings were grown in soil contaminated and uncontaminated by Colocasia were inconclusive.

Power (1990) conducted experiments on the effects of oxygen concentration and substrate on the growth of Texas wildrice. Her work revealed highest germination levels in the lower oxygen concentrations (0.1 and 1.0 ppm) and the lowest germination levels in higher oxygen concentrations (4.0 and 5.0 ppm). Also seeds buried in clay (with a reportedly low oxygen content) had greater germination than seeds placed on top of sand (where oxygen content would be high). However a greater percentage (88%) of seeds germinated when buried regardless of the substrate. It should be noted that these experimental treatments were submerged. Additionally plants growing in clay produced more seeds than those growing in sand although this difference may have been due to a difference in nutrient availability between clay obtained from a pond and sand procured from a lumberyard.

Currently Section 6 studies conducted by Power (1992) are showing that herbivory is greatest in shallow water (0.3 m) and that Texas wildrice produces more biomass in deeper water (1.6 m).

Other efforts have been made to grow Texas wildrice outside the San Marcos River. All have met with failure. Beatty (1976) attempted to grow plants in Salado Creek in Bell County. The plants established and produced inflorescences, but local recreational activities plus periodic removal of aquatic vegetation from the stream, destroyed all plants. Emery transplanted more than 100 clones of Texas wildrice into various central Texas sites, including the Comal River in New Braunfels. However flooding washed the plants away before they could become established, and a planting in Spring Lake was eaten by nutria.

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ENDANGERED SPECIES ACT: TIME FOR CHANGE — A White Paper

ENDANGERED SPECIES ACT ROUNDTABLE

I. INTRODUCTION

A. A LANDMARK REAUTHORIZATION

The sixth reauthorization of the Endangered Species Act of 1973 ("Act" or "ESA"), due this year, will be a landmark event. The Act was enacted in an era marked by rapid growth and a shared sense that government resources were unlimited. Its passage was fueled by a recognition that this Nation previously had paid inadequate attention to the environment. By contrast, today, at the close of the Act's second decade, environmental laws are in place and our society faces significant economic problems and challenges. Further, recent application of the Act has demonstrated that it is a law in trouble; it is failing both those who are dependent on our economic structure — business, labor, and local communities — and those who profess paramount interest in environmental protection.

This reauthorization, then, must not simply extend the law. Instead, the Act must undergo a comprehensive review. The result must be an ESA amended to reaffirm the fundamental goal of conserving endangered and threatened species, while assuring that the decisions taken to attain this goal truly balance species conservation requirements with the economic and social needs of the human community.

B. A TROUBLED LAW

The Act is in trouble for several reasons. First, implementation of the Act has demonstrated conclusively that our resources are insufficient to provide protection for all endangered and threatened species. There are over 1,200 species, subspecies, and vertebrate populations listed as endangered or threatened under the Act, 676 of them in the United States. Over 3,500 more are official candidates which do not have a high enough priority to undergo the listing process. The Fish and Wildlife Service tries to list at least 50 species each year. The Interior Department estimates that it would take nearly 50 years and $114 million to review and list the current official candidates. Meanwhile, federal officials must review numerous petitions each year to list additional species, subspecies and populations. In its 1990 annual report, the Council on Environmental Quality noted that the Natural Heritage data base reported as many as 9,000 domestic species were at risk.

C. THE IMPACTS OF FUTILITY

This failure is compounded by the severe economic and social harm imposed by the Act. During the two decades of the Act's implementation, escalating numbers of obscure plants, snails, mollusks, crustaceans and insects have been listed. A more troubling trend is the listing of species which are not few in number or confined to a few discrete sites, but have larger populations inhabiting vast multi-state ranges (*e.g.*, Snake River Sockeye Salmon, 3 states; desert tortoise, 4 states; and Northern Spotted Owl, 3 states). These listings no longer affect an isolated project or two, but disrupt entire regional economies. The traditional image of a lone colony of a snail darter or butterfly subspecies confronting a single dam or a shopping center project no longer accurately portrays the settings in which the Act operates.

Recently, organizations that oppose economic activities, often for reasons unrelated to species conservation, have targeted such activities for ESA challenges. The ESA has supplanted all other statutes as the favorite statutory weapon for mounting administrative and judicial attacks on legitimate economic enterprise. It is the most severe, least flexible of all environmental laws, proudly characterized by one environmental activist as the "pit-bull of environmental laws."

Finally, extension of the Act to more and more regional species and its increasing use to frustrate economic activity constitute an assault on the rights of local communities, businesses and private landowners. Federal officials (or state and local government regulators pressured by federal officials) are informing private landowners, with explicit and implicit threats of criminal and civil prosecution, that the Act prevents them from using their land as they have intended. Loss of property values inevitably follows. For example, in Travis County, Texas, where two listed songbirds as well as other listed species appear, private landowners have been threatened with criminal prosecution for such innocent activities as clearing brush from their fence lines. Property values there have fallen more than $350 million, economic development has halted, and agricultural operations are in limbo. Federal officials, eyeing opportunity in the depressed real estate market, now talk of creating a wildlife refuge for the songbirds. Landowners have little recourse but to sell.

This listing of more regional species, the use of the Act as the weapon of choice by activists, and its increasing impact on private lands have spread the adverse effects of the ESA far beyond the scope of congressional intent. The Act has halted timber harvesting in the Pacific Northwest, the Rocky Mountains States, the Southeast and the Southwest, restricted shrimping in the Gulf of Mexico, curtailed hydroelectric and other water projects throughout the country, and blocked home construction in the Sunbelt where the demand has been greatest (Florida, Texas, and California).

Many of these activities are the life-blood of their regional economies. The result is not simply foregone economic opportunities for a few. Thousands of jobs are lost, families and communities are devastated. In the Pacific Northwest, 6.9 million acres, more land than in a four-mile wide band from Boston to Los Angeles, have been designated as critical habitat for a single subspecies, the Northern Spotted Owl. Employment loss to the ESA for this subspecies alone is estimated to be anywhere from 50,000 to 100,000 jobs. Social agencies and school districts have reported alarming increases in the incidence of battered spouses, alcoholism, suicide, and troubled children. Timber dependent communities trying to cope with this social distress have lost medical, counseling and other services as their statutory share of federal timber sale receipts has fallen. The University of Oregon has estimated that local taxes must increase by over 1000% in five Oregon counties and by hundreds of percent in several others to replace the federal payments if timber sales cease.

As the list of protected species lengthens, and more and more of the Nation is declared to be their "critical habitat", the true cost of the ESA is becoming evident. In this year of ESA reauthorization, Congress must acknowledge the unacceptable costs of a statute which is failing even to accomplish its intended objective.

II. WHAT IS WRONG WITH THE ESA?

A. A LAW OF ABSOLUTES THAT IGNORES ITS OWN IMPACTS

The answer to why the ESA has become a potent weapon for thwarting all forms of economic activity begins with the absolute terms in which its requirements and prohibitions are couched. Absent from the Act is any flexibility provided by such phrases as "insofar as practicable", "best available technology", "to the extent feasible", "in the public interest", etc. which are found in virtually all other environmental statutes.

No federally-authorized action of any kind may jeopardize the continued existence of a listed species or adversely modify its designated critical habitat. ESA § 7(a) (2). No person, public or private, may "take" a listed species. ESA §§ 3 (19) and 9 (a)(1)(B). The Fish and Wildlife Service has aggressively defined "take" of a listed species to include any land use action which adversely modifies habitat and thereby injures or "harms" just one member of a listed wildlife species. 50 C.F.R. §§ 17.3, 17.31(a).

Today, the courts no longer require evidence of a real injury to an individual member of a listed species to establish that a landowner has engaged in an illegal "take". They have, instead, allowed "harm" to be demonstrated by statistics alone.

And these statistics need not be related to the landowner's property or the members of the species that occupy it; they can prove a "take" simply by showing a long-term decline in the species' overall population in all the territory it occupies. *Palila v. Hawaii Department of Land and Natural Resources*, 853 F.2d 1106 (9th Cir. 1988).

An individual need not "intend" to take any listed species to be prosecuted under the Act's stiff civil and criminal penalties. ESA § 11(a) and (b), *U.S. v. St. Onge*, 676 F. Supp. 1485 (S.D. Fla. 1987). Any citizen can file suit to enjoin otherwise lawful economic activity, as shown in Lane County, Oregon, where over 150 private landowners and businesses were notified they will be sued to stop silvicultural activities sanctioned by the State of Oregon. ESA § 11(g).

A further consequence of the Act's absolute nature is its preemption of many statutory directives calling for multiple use of natural resources. Congress in its wisdom has designated many public lands and resources for a specific use such as a park or wildlife refuge. Congress generally directs that the remaining public lands and other natural resources such as water be available for multiple uses. The presence of listed species and their habitats on or in these resources results in elimination of their multiple use and de facto designation of them for single use as a listed species preserve.

B. INDISCRIMINATE LISTINGS: NO BALANCE, NO DETERMINATION OF THE PUBLIC INTEREST, NO STANDARDS

Moreover, the ESA requires a listing to be determined "solely" on the basis of "scientific" data. ESA § 4(b)(1)(A). No consideration may be given to the economic or social impacts of listing. The listing agencies cannot even ponder whether listing will do any good — they must list, and have listed, "basket cases" that will proceed to extinction no matter how costly the recovery effort or how much economic activity is prohibited. There is simply no "public interest" test to temper the decision to list.

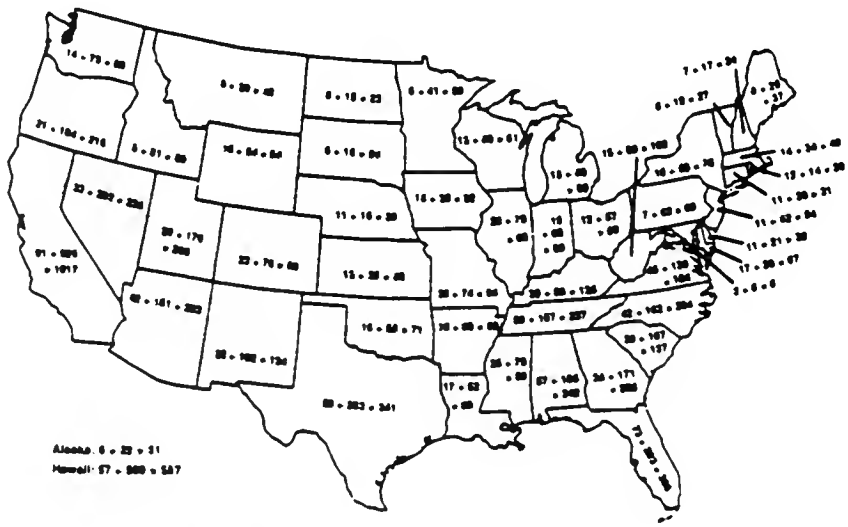
Remarkably, neither the Act nor the Fish and Wildlife Service have established standards to determine what constitutes "best scientific and commercial evidence available." Given the time frames the Service must work under, the "best" scientific data *available* may fall far short of the biological data necessary for a true appraisal of the species status. Also, the Service commonly applies a dual standard — the Service can use opinion and assumption (Delphi approach) to propose or list, while commentors must provide (in even a shorter time frame) clear scientific proof and research results as their evidence. The Service's analysis of the evidence is often not peer-reviewed and the data itself is often collected and compiled without professional review.

C. A SPECIES IS REALLY A SUBSPECIES IS REALLY A POPULATION SEGMENT

Worse yet, the ESA employs an unusual definition of species which can be listed and protected. It includes not only true biological species, but all "subspecies" and, in the case of vertebrate species (which are, of course, the most popular species), even "any distinct population segment[s]." ESA § 3(16). Indeed, the very title of the ESA is misleading; it should be named the Endangered *and Threatened* Species, *Subspecies, and Population Segment* Act.

This expansive definition of "species" has been used to list subspecies and populations of species which are still abundant generally (e.g., wolves, bears, owls, etc.). It has led to the imposition of differing restrictions for the same species and allowed selective use of the listing process by activists to block economic activities in targeted geographical areas. For example, in some states, the squawfish is a threat to trout and salmon and is killed as a pest; in other states, where the squawfish is not prevalent, water projects have been delayed to protect it. Indeed, because species always decline and become isolated at the fringe of their ranges, thereby creating separate populations and ultimately even subspecies, the number of "species" eligible for listing may be endless. And, since the ranges' fringe is where most economic activities occur, the Act's ability to assert protection over populations and subspecies isolated there makes it the perfect weapon to wield against those activities.

Unfortunately, the listing agencies have exceeded this already liberal definition of "species" by listing entire genera and even families, including hundreds of different species, and hybrid or mongrel groups of



Legend
Listed species + candidate species = total species of concern

Source: U.S. Fish and Wildlife Service—February 1991.

animals. With the ability to list almost anything and the inability to consider any adverse consequences of listing, the agencies can extend the Act's coverage, and their regulatory control, virtually without limit.

D. CRITICAL HABITAT IS CRITICALLY FLAWED

This Act's coverage can also expand through the designation of "critical habitat." Not only must endangered and threatened "species" be listed but, with few exceptions, their critical habitat must also be designated at the same time or within a year. ESA § 4(a)(3). Critical habitat designation is the only procedure in the Act specifically directing analysis of economic effects: the Act allows certain areas to be excluded from designation if the economic and other benefits of exclusion "outweigh" the scientific benefits of inclusion but only if the failure to designate the area will not result in the extinction of the "species." ESA § 4(b)(2). The Fish and Wildlife Service frequently evades consideration of economics by invoking the Act's extraordinary circumstance criteria to avoid designation. One federal court has already found the agency's use of these criteria to be improper. *Northern Spotted Owl v. Lujan*, 758 F. Supp. 621 (W.D. Wash. 1991).

Nevertheless, by rule and policy the Fish and Wildlife Service has written economics out of the designation process. The regulations permit the agency to withhold the required economic analysis from the public until the final designation is made, thus preventing the public from presenting effective comment on them. 50 C.F.R. § 424.19. Even if the economic analysis is done well, the agency has leached all value from it by adopting the policy that the only economic effects to be considered are those above and beyond — i.e. separate from — the economic effects of listing the species. With only these incremental effects considered, the scales used to weigh the benefits of excluding or including areas in critical habitat are "fixed."

Furthermore, the agencies often have designated as critical habitat all suitable habitat within the entire range of a listed "species," sapping the word "critical" of any meaning and the designation itself of any real purpose.

D. RECOVERY PLANS: PREPARED IN THE DARK, IF AT ALL, AND WITH NO LEGAL EFFECT

The Act's problems do not end, but only begin with he indiscriminate listings of species, subspecies, and populations. When a listing occurs, a "recovery plan" is supposed to be developed. ESA § 4(f). The plan must describe the steps federal, state, and local agencies and private individuals should follow to assist the "species" to survive and recover. However, recovery plans have been prepared for barely half of all listed domestic "species."

Most of the completed plans were prepared long after the listing. Thus, private citizens and public officials are not informed about the consequences of listing a "species" when the listing occurs. Nor are they given timely guidance on how to comply with the Act. Even if a landowner fervently follows a recovery plan, the plan provides no assurance that he will not still be sued for a "taking." Further, agencies are free to ignore the recovery plans and place more stringent conditions on landowners.

Recovery plans are drafted for the most part by agency employees without significant involvement of the public and do not calculate or disclose the full public and private costs of recovery. Even where the agency includes the public in plan preparation, such as for the gray wolf in Washington, it attempted to limit participation to one segment of the public and to exclude others.

E. DELISTING: A MYTH

The ESA's coverage, once applied, seems impossible to remove. The ESA does have a formal delisting process. ESA § 4. But the agencies appear unwilling to relinquish jurisdiction. And, when they do try, activists are quick to condemn the delisting proposal as "political" and scientifically unjustified. For over a decade, for example, federal officials have been reporting that the number of gray whales is at an historical high level, but only in the last few months has a delisting proposal been made. And then it was immediately decried by activists. The alligator was not even partially delisted until it had become a severe nuisance in many areas. A number of species and subspecies, such as the grizzly bear, the bald eagle and the gray wolf, have far exceeded recovery levels needed for their continued survival but delisting does not appear imminent.

Worse, conservation — defined in the Act as recovery of a species to the point it is delisted and which Congress established as the purpose of the Act — has failed. Only five of the listed species have recovered, and three of these owe their recovery more to the discovery of larger populations than to recovery efforts required and funded under the Act. Six species became extinct after listing while under the ESA's protection. The General Accounting Office reports that about 200 species, 28% of those on the list in 1988, will probably never recover. The Interior Department estimates that recovery of both listed and official candidate species will cost $4.6 billion.

G. MOCKING PROPERTY RIGHTS

Many reasonable and productive uses of property are being substantially curtailed or terminated altogether by the Act. The Act's most adverse processes are: the broad definitions of "harm" to include modification of a species' habitat and of "species" to include subspecies and populations (several occupying multi-state regions); the inability to consider the impacts on society; the Act's severe civil and criminal sanctions; and aggressive "enforcement" by the Fish and Wildlife Service and activists. Landowners have been prohibited from cutting trees, clearing brush, using pesticides, planting crops, building homes, grazing livestock and protecting livestock from predators. The Act has deprived landowners of the only economic uses they can make of their properties — uses which are productive and contribute to local, regional, and national economies and welfare. Property values have been depressed or destroyed in cavalier disregard of the Constitutional protection of property rights and despite Congress' intention to prevent habitat loss on private lands by land acquisition under ESA § 5. The government has shown no inclination to compensate citizens for the unconstitutional take of their property.

H. PERMITS AND COMMITTEES DO NOT SPELL RELIEF

The ESA was amended in 1978 and 1982 to provide two processes that would accord some relief, particularly for private landowners, when the ESA's

constraints become unwarranted. However, because of exorbitant costs, lengthy delays, and insurmountable procedural barriers, these processes are virtually unavailing.

The 1982 amendment allows private landowners to submit "habitat conservation plans" to the Fish and Wildlife Service in the hopes of receiving "incidental take permits." The permit would allow the landowners to develop their lands without fear of penalties for the "take" of a listed species. Yet only a dozen or so such permits have been issued in the decade since the ESA was amended to authorize permitting. To obtain the few permits that have been issued, most landowners have been compelled to sit down with public officials and activists, make public the details of their businesses, and invite these new parties to make the basic business decisions for them. These few permits have cost the landowners many thousands, even millions, of dollars (with the landowners forced to dedicate much of their land to the species, or to purchase for the species several times the acreage they intend to develop). With few exceptions, these permits have taken years to negotiate.

Those with the fortitude to pursue incidental take permits can expect scant assistance from the Fish and Wildlife Service. The Fish and Wildlife Service has refused to issue regulations for either plan preparation or permit issuance. Instead, the agency relies on "draft" guidelines which it may ignore. Attempts by landowners to seek the agency's advice are almost always rebuffed; the agency opines that such assistance would compromise its integrity as the ultimate decision maker on the landowners' applications. The agency has even failed to advise landowners of potential exposures under other laws. For example, it has urged some of the largest domestic timber producers to prepare joint habitat conservation plans for the Northern Spotted Owl without ever cautioning them that negotiation of such plans could place the companies in violation of the Nation's anti-trust laws.

The direction chosen by the Fish and Wildlife Service for future habitat conservation planning is making the process even less accessible. The agency now encourages preparation of plans covering wide areas involving many landowners and multiple species, including species that have not even been listed. This mega-planning can only lead to greater expense and time with fewer permits issued.

The other method of obtaining relief, established in a 1978 amendment, is to apply for an exemption, with mitigation and enhancement measures, from a cabinet-level Endangered Species Committee. The exemption may be granted only if, among other things, at least five of the 7-member Committee find that the benefits clearly outweigh the alternatives, the public interest is served, the action has regional or national significance and no irreversible or irretrievable commitments have been made. The applicant must pay for all the mitigation and enhancement measures imposed by the Committee as a condition of the exemption. This method, however, has never worked as intended because of the impassable procedural roadblocks erected by the Act. The Committee has only deliberated to conclusion twice and, on both occasions, the Congress had to pass reauthorization Act amendments to waive obstructive procedural requirements and simply order the Committee to convene.

In short, whatever hope Congress entertained for the incidental take permit and Endangered Species Committee processes, both have failed. Both are out of reach of all but the very fewest landowners and developers who possess virtually limitless resources and patience to endure the application and review process as well as implementation of the mitigation requirements.

III. CONCLUSION

If this troubled law is to be effective and to earn the renewed support of the American people, it must be amended to remedy the problems discussed here. The amendments process must occur promptly with the Act's sixth reauthorization.

LETTERS FROM MEMBERS

(The following letter was brought to our attention by an observant TWA member, and is reprinted here by the permission of its author, Howard L. Burris, Jr. It was sent to a long list of government and congressional figures, including the President and the Secretary of the Interior, and the entire Texas Congressional delegation.)

Dear Sir (or Madam):

I felt compelled to write you about my experience with an application of the Endangered Species Act in the hope that my story might sensitize you to a problem faced by a growing number of Americans. Please know that I believe fervently that endangered species should be protected. But at the same time I feel that this well meaning legislation can cause great harm, which I trust is not its intent.

Let me immediately say that I am not writing to ask for a staff review of my circumstances. The last thing this citizen needs is yet another expository on the administrative or legal mechanics of the Endangered Species Act. I have spent the last three years writing every relevant agency and federal official. I have received too many explanations of why the action taken here was technically correct, and I am quite confident that there was compliance with the letter of the law. I am concerned about the righteousness, not the technicalities, of that law.

Consider my case. The subject 980-acre property was purchased in 1946 by my grandfather, Beauford Jester, Governor of Texas 1946-1949. After it passed to me it was clear that the land would become legally incorporated into the city. By 1976, as annual property tax bills became burdensome, some decision needed to be made.

Ironically, I had informally enquired if any conservation group might be interested in acquiring the land, but there were none. The Audubon Society indicated they would accept a *gift*, but they contended at the time that there was little value to it as wildlife habitat, as there were millions of acres of identical ecosystem beyond the city limits. They indicated that the cause of conservation might be best served if in time they, or perhaps another group, could have the land to sell and to apply the proceeds to the acquisition of comparatively more valuable habitat elsewhere.

Developing the land into home sites personally seemed, then, to be a logical alternative to consider. Austin's city planners agreed with the subdivision proposal, as that land use conformed to many adjacent tracts. So, starting in 1978, I invested all of my savings as well as borrowed money to begin to build the necessary infrastructure. Even during the Texas real estate crisis the project enjoyed considerable success, steadily selling home sites

every year.

More than ten years *later* I was suddenly confronted with a federal injunction from proceeding with any further activity because of the threat to endangered species. To that date the issue of endangered species had never been once broached by any authority--local or federal. I explored legal solutions and examined the administrative remedies theoretically available to me. In the process my finances were exhausted, and eventually I lost almost all of the remaining land in a foreclosure proceeding. I did not lose the memories of officials lamely suggesting that I just needed to be patient.

Just prior to the foreclosure in March 1992, legitimate conservation groups had called to enquire if they could acquire the remainder of the tract, but they also indicated they wanted only to pay ranch land prices. They indicated they could not afford to recognize the value of improvements which I had been making over the preceding fourteen years. Less legitimate elements of the conservation community called me anonymously, threatening to burn down my house for my "wanton destruction" of valuable habitat.

I might note that in 1991 I had applied for -- and received -- partial relief for some acreage under an administrative remedy of the Endangered Species Act. But in the opinion of my bank it was too little, too late. The lender foreclosed on the majority of the remaining acreage and sold the released tract to a third party, who of course did not have to invest in infrastructure improvements. I had already installed and paid for those in the preceding years with my resources.

The outcome broke my heart, but I had to try to make some sense of the experience. I know that this and other actions to stop habitat destruction are part of a popular mandate, which I support, to err on the side of any endangered species. I even accept that the matter of property rights needs to be resolved "later." But in resolving those rights too much "later" there can be no possible justice for any effected party. Deferring action indefinitely absolutely guarantees the absence of fair treatment.

If one considers the issue from an historical viewpoint, developing private land into home sites -- especially when that utility is entirely consistent with adjacent uses -- is not some moral parallel to, say, slavery. Neither the ownership nor the development of land is a wrong *per se*, which ought to obviate our fundamental rights as Americans. Development is a wrong *after* a determination is made that there is present risk to an endangered species or an archeological site. But it is difficult to understand how rights related to real property can equitably be excluded from Constitutional guarantees when no determination whatsoever that a species might be prejudiced was made *before* development occurred.

Any of us who trust and believe in the American system accept our

government's demands of us, and at times those demands are difficult. When asked, we agree to pay taxes when we would rather not. We will even agree to have our children sent to war when we would rather see them out of harm's way. But we make those sacrifices with an abiding faith that all of these demands are fair and shared by all citizens. Our collective enthusiasms and passions might ebb and flow, but at the heart of our faith in this country is the overriding belief that individual rights -- among them individual property rights -- are *the* transcendent consideration.

In 1942, for example, any of us could probably have appreciated the national security imperative in seeking out suspected Japanese spies in America. In the 1950's we could probably have enthusiastically supported the vigorous investigation of potential Communist infiltrators in government and other aspects of American life. But I would hope that upon reflection most of us became uncomfortable with the wholesale destruction of careers and private lives that resulted from both excesses of popular enthusiasm.

(Understand that) my story may well be representative of another moment in our history when a well meaning, popular idea is harnessed to a power which runs roughly and remorselessly over us. Certainly with the perspective of this citizen who has been ruined by this particular law, it is very clear that our exuberance has created anew the potential for such excess. Many of us are being harmed irreparably. Many will never recover. And I submit to you that all departures from our core value system -- no matter how critical those issues might appear at the time -- come to seem like pitiful excuses to allow government to beggar any one of us.

I am told that some day a regional habitat conservation plan (HCP) will be crafted here in Austin which will allow acreage to be released for a fee or perhaps purchased at fair market value for a wildlife preserve. Certainly, the HCP process could be a great facilitator which could serve the interest of both conservation and private landowners, but it does not do that. It is simply too balky and inefficient. It breaks the will and the pocketbooks of citizens waiting for resolution, which I trust was not the intent of the law.

For the last three years I have awaited trial for my financial life. I committed no crime, but although I was consigned to financial jail, I never received a trial or a sentence. The law and apparently the system were both totally indifferent to my position or the outcome. I could only watch my financial condition, fourteen years of work, and almost fifty years of family ownership wither waiting for some decision which even now is still not in sight.

The small measure of advice I might have the temerity to commend to you would be to suggest that some effective mechanism be developed to expedite the HCP process. All of us do understand the need for patience and caution in the design of tractable wildlife habitat.

But please try to see that many of us, who do want to comply with the letter and spirit of the law, cannot survive indefinitely while various branches of government cast about for solutions, ideas or financing with no sense of dispatch and no deadlines such as the ones with which we must still contend to retain title.

Second, I would urge the federal government to consider loaning money through the *Land and Water Conservation Fund* to local HCP's for the acquisition of critical habitat. This could provide some interim relief to some land owners. Those loans could eventually be returned with interest to the government through the imposition of local user fees. Such an initiative would provide relief to affected property owners who now only see that the government has an appetite for the utility of property--but not for any of the financial burdens of ownership.

If the federal government cannot afford even to loan money for the acquisition of land critical to endangered wildlife, one might conclude that the matter cannot be much of a priority for the community. Alternatively, one might more cogently argue that deferring the cost indefinitely is convenient, and far less expensive, for the community at large than sharing in the cost of maintaining or holding land, as the individual owner must to retain title. That course of (in)action is dishonorable and unworthy to say the least.

This endless delay serves no one. Certainly the federal government with its considerable powers can insist on stasis. But the government only does so at the expense of the private individual, who is not better prepared to finance this--or any other--public purpose than the federal Treasury. When the value of private property is indefinitely impounded by government, individuals, innocent of any crime or transgression, do suffer.

If there is a moral lesson in this, it is that the *power* to do something must be distinguished from the *right* to do it. The federal government filled with the vigor of a public mandate to preserve endangered species has afforded itself the power to force private citizens to put their affairs and their lives on "indefinite hold" while their futures, held in the vise-like power of government, slowly die.

Even if a private citizen can manage to survive that--and many of us cannot--it is not at all clear to this citizen that such power is fundamentally right.

Sincerely,

Howard L. Burris, Jr.
Austin

(As of press time, Mr. Burris had received a total of four responses to his 131 (our count) mid-February letters. Quoting, "One, from Sen. Bill Bradley allowed that the Senator was 'highly concerned with the environment.' Texas Cong. Armey, Cong. Laughlin, and Texas Sen. Phil Gramm, however, did address the problem described in the letter in a sympathetic manner."

In granting permission to reprint, Mr. Burris goes on to say, "I hope your readers find this letter somewhat interesting. I will be most interested in any feedback, as I am contemplating writing a newsletter for property owners on this subject." Letters to Mr. Burris may be directed to 98 San Jacinto Blvd., Suite 350, Austin, TX 78701.)

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Landowner Incentives for Maintaining and Developing Wildlife Habitat

Texas biologists who have experience in dealing with landowners in the management of game species over the past two decades realize that cooperation from private landowners in developing or maintaining habitat for wildlife is based on several factors. Three of these considerations are discussed below.

1) The landowner's individual interest in wildlife.

A rural Texas landowner's interest in wildlife usually stems from the fact that he/she grew up in a rural setting where hunting and fishing were major sources of both recreation and table fare. Smaller species such as songbirds and wildflowers were observed and enjoyed but otherwise taken for granted because of their abundance and accessibility. By and large, this is still true.

The demographics of the Texas landowner have changed considerably in the last twenty-five years. Much of rural Texas is now owned by relatively affluent urban and suburban dwellers who either no longer reside on the land and lease it to others or who have purchased land for recreational or quality of life pursuits. Often these people have an interest in more forms of wildlife besides game species, but do not have the direct knowledge borne of observation and familiarity.

2) The landowner's pocketbook.

Affluent landowners often invest considerable resources into wildlife related projects if they can realize some recreational benefits in the process. Desire for increased fishing and hunting opportunities generally drive these projects. Many non-game species are favorably impacted by these habitat improvements. It is ridiculous to assert, as some have, that habitat manipulations for game species such as deer and quail benefit only those game species. Every species that fits into the same successional and habitat niche as these two creatures will benefit. Those that think otherwise are the same people who want to use a single species approach to endangered species restoration instead of a more holistic ecosystem approach.

Not all landowners have money for such projects. There is a growing number of small acreage recreational landowners who own 10, 20 or 50 acres who are struggling to make their land payments and pay property taxes, much less to make habitat improvements. Too often, open space agricultural tax exemptions for these properties are based on antiquated or inflated livestock stocking rates. Frequently, this contributes to overstocking or conversion of native pasture to fertilizer/herbicide dependent hay production in order to satisfy unrealistic tax criteria, thus eliminating wildlife habitat. Texas attempted to address this problem with the passage of H.B. 1298 in 1991. This legislation authorizes wildlife

management practices as a legitimate agricultural use. Although, the law has been effectively demolished by constitutional challenges, the idea remains viable.

3) Wildlife economics.

Millions of acres of excellent wildlife habitat in Texas are being preserved by the favorable economics of selling access for hunting and fishing privileges. Were it not for the tremendous demand for this type of activity, much of this habitat would have succumbed to the bulldozer long ago. Here again, large tracts of important habitat are being held intact because hunting/fishing is a lucrative enterprise that is compatible with other more traditional land uses and helps pay those high property taxes!

What is Needed

We need a shift in thinking away from the idea that incentives need to be provided to develop and maintain habitat **specifically for endangered species**. What needs to be done is to provide landowner incentives to **develop and maintain WILDLIFE habitat, period.** Concern only with endangered species takes us right back to the single species approach that has proven so ineffective.

By developing, enhancing, and maintaining existing quality wildlife habitats we keep other species from declining and being placed on the endangered list as well as providing for those already on the list. This is a lot like fire prevention and auto safety; a pro-active effort can save many species and save our nation large amounts of money!

Much has been said about landowner incentives for developing habitat, but little about keeping existing habitat intact. The federal inheritance tax is probably responsible for the fragmentation of more habitat than all the developers in Texas. This tax makes it **necessary** for heirs to sell the land for development because most families don't have the tremendous amounts of cash necessary to cover current inheritance taxes and must sell land to finance holding on to the rest of it. In Texas, we have seen thousands of ranches comprising millions of acres of habitat broken up and sold in this manner. Wildlife inevitably suffers, not to mention the impact on ranching families that are left with a unit of land that is no longer economically viable and that is eventually also sold off as 10 and 20 acre "ranchettes".

Substantial inheritance tax relief is important for landowners who **maintain** large tracts of existing habitats and that **actively manage** their property in a manner that benefits not only their production (be it livestock, forest products, or crops), but also their watershed and wildlife. Such a system **must recognize the compatibilities** between agricultural production and the wildlife

resource and strive for active management to enhance and create this symbiosis. Without such recognition, (i.e. using a non-management or purely preservationist approach), such a program would be meaningless and worse than futile.

Federal Agricultural Cost Share

Development of special habitats such as wetlands restoration and/or creation could and should also qualify for inheritance tax relief. Here again reasonable parameters should be in effect. Livestock should be allowed to drink the water impounded by these wetlands, but not to graze or trample all the nesting or brood cover around it. This is where livestock management techniques and wildlife management techniques overlap and come into play. Purists who feel that every foot of pond edge should be heavy ungrazed cover ignore the needs of shorebirds such as stilts and sandpipers, as well as those of the producer. Livestock and fencing are valuable tools that can be used to promote maximum diversity. It is important that management criteria should be realistic lest the effort be futile.

Criteria for such a program should be developed by multi-lateral groups at the state and regional levels with special attention to the inclusion of personnel with expertise in multiple use and hands-on management. There will be no room for "environmental elitism" if this is to be a successful effort.

Additionally, existing federal cost share programs should be expanded to include practices that benefit both livestock and wildlife simultaneously. Given the current value of game species, innovative ranchers have already used federally-funded water developments to benefit wildlife and have justified the water lines and storage by putting in a cow trough! Why not make the system work for BOTH as part of the cost-share criteria?

Brush management practices that benefit ranchers and create successional levels productive for black-capped vireos or prescribed burns that enhance forest openings for red-cockaded woodpeckers, while controlling uderstory, are real, viable practices that can directly benefit production for landowners and wildlife. All of this can be operational within the current framework of agricultural cost share programs.

Conservation Reserve

Allowing carefully managed grazing on CRP lands to provide landowner income and reduce government payments to landowners could actually enhance the value of these tracts to wildlife while reducing costs of the program. Many producers on the Texas High Plains have said that if they could graze these tracts while receiving a reduced government payment, they would be much less

inclined to plow them again.

Incentives for Private Initiative

In order to best provide incentives for private landowner initiative it is absolutely imperative to understand that all landowners are **not the same**. Landowners whose purpose for owning land is for resale and/or development are in nowhere near the same category as landowners who live on the land or who own land for quality of life or recreational purposes. Although there are different levels of compatiblity depending on intensity of use, agricultural uses, especially ranching, are generally much more consistent with providing wildlife habitat than development uses.

We must make the immediate distinction that rural landowners are already the **current providers of most wildlife habitat** in Texas. Under the present implementation, private efforts "DON'T COUNT" toward recovery of a species. If a rancher in Travis county offers to sign an agreement with the U.S. Fish and Wildlife Service to provide management of his 10,000 acres of prime warbler habitat in perpetuity according to the recovery plan to benefit the species, it would be of no significance as far as the recovery plan is concerned. The Service would still be looking for the same 40,000 acres to purchase for a refuge before the offer was made.

Private efforts are not recognized as part of the equation. Where does the Service provide evidence that their land management is so exemplary? The Aransas National Wildlife Refuge formerly had Attwater's prairie chicken, red wolves, and nesting bald eagles under a private ranching regime. Where are they now? Most prairie chickens and nesting Southern Bald Eagles in Texas are on private land!

By the same token, private efforts are not protected from legal action by environmental groups. If that rancher signs an agreement with USFWS to manage his ranch for himself and the warblers in perpetuity, there is nothing to protect that rancher from frivolous lawsuit from some environmental group that disagrees with his stocking rate, his fencing pattern, or the color of his gate on the highway.

If my efforts don't "count" toward species recovery and if the government won't protect me from outside suits stemming from the fact that I am now in the public eye because of my efforts, where is the incentive to help?

If the implementation used positive reinforcement such as:

1) Ensuring that sanctioned private recovery efforts count toward recovery.

2) Using signed management agreements that protect the rural landowner from frivolous lawsuits.

3) The Service employing experienced field staff who know how to work with rural landowners and actively solicit their help in managing habitat and restoring species.

4) The Service providing state-wide recognition for those landowners who particpate in the program.

5) **ASKING** those rural landowners for their help! Quit trying to force them to do or not do things and simply ask them to get involved and let them know what they **can do** to help and not just what they can't do.

There would then be a true incentive for the landowner to be an active participant in the process. As an example, eastern wild turkeys, long extirpated from East Texas, are being rapidly restored to large areas using a very similar program. Rural landowners are providing the habitat and with local townspeople, are helping to raise the money! Thank goodness the Eastern Wild Turkey is not a listed species!

These are but a few of the positive ways that landowners and operators could be provided with direct and indirect incentives to **manage for wildlife** both in the context of their normal operations through current cost-sharing programs, by using special methods to obtain forms of tax relief, and by using proven common-sense, time-tested landowner involvement that appeals to the rural landowner's sense of service and interest in nature and makes him part of the equation.

What We Must Do

We must manage **habitats** and **not species.** We must provide the flexibility in the Endangered Species Act for the private landowner to perform the managment necessary to benefit himself and the species, even if this management results in a temporary "take" of habitat, such as in the use of a prescribed burn. We must provide sufficient experienced, knowledgable personnel familiar with hands-on techniques to assist landowners in planning and executing this type of management for the benefit of the agricultural enterprise and ALL the wildlife on the land. We must recognize that management for economic viabilty can and should include provisions for wildlife and provide the necessary incentives to make that a reality. We must recognize that most rural land use is compatible with wildlife when proper management is exercised.

Texas has been successfully managing game species using this very positive approach for decades. Given understanding, education, the right personnel, flexibilty, and the right landowner incentives, the same type of program that has proven so successful for game species can prove just as successful for non-game and endangered wildlife.

INEQUITIES IN PROCEDURES AND STANDARDS FOR ENSURING COMPLIANCE OF FEDERAL AND NONFEDERAL PROJECTS WITH THE ENDANGERED SPECIES ACT

FEDERAL PROJECTS Consultation Under ESA § 7 (Incidental Take Statement)	PRIVATE, STATE & LOCAL PROJECTS Conservation Plans Under ESA § 10 (Incidental Take Permit)
STANDARDS	
• Not Likely To Jeopardize The Continued Existence Of The Entire Species	• Not Harm Or Harass A Single Member Of The Species
• Not Adversely Modify Critical Habitat Designated By Rule	• Not Adversely Modify Any Habitat Identified Without A Rule
DURATION	
• FWS Must Decide In 90 Days	• No Time Limit For FWS To Decide -- Typically, 1-5 Years
COST	
• Little Cost Beyond Normal Expenses Required By NEPA And Other Env'l Laws	• Steep Costs, Typically in $100,000's, To Both Prepare And Implement The Conservation Plans
FREQUENCY	
Compliance Certified Through Consultation 7,600+ Times Each Year	Compliance Certified Through Permit Issuance 12 Times In A Decade

VISIBILITY

Process Is Closed; No Hearing No Public Participation	Process Is Open; Public Hearing Must Be Held; Environmentalists And Public Officials May Be Invited To Join Steering Committees To Review And Revise Private Landowners' Plans

ANTI-TRUST LAWS

Anti-Trust Laws Do Not Apply	Anti-Trust Laws Do Apply; No Immunity Even With Issuance Of The Permit

EXEMPTION

Exemption Procedure Is Available Through Application To Endangered Species Committee	Exemption Procedure Is Not Available

PROPERTY RIGHTS

Property Rights Are Not Affected When FWS Fails To Issue The Statement	Property Rights May Be Lost When FWS Denies The Permit

ALONG THE BACK SENDERO

By David K. Langford

Reprinted from the August, 1991 *Texas Wildlife

OK. Now it's my turn to comment on the Endangered Species Act. Last month Bill Morrill and Larry Weishuhn devoted their columns to this subject. And, both were very enlightening. And perceptive.

Let me begin by reminding everyone who we are. We are hunters, landowners, educators, biologists, wildlife managers, fishers, researchers, etc. and concerned citizens. We place a high (or the highest in many cases) priority on managing the lands we own, control, lease or consult on for the benefit of wildlife. In many cases, nothing is done without considering the ramifications to wildlife first and foremost.

We are also the ones who put our money and our time and our efforts where our mouths are. We supported, wholeheartedly, H.B. 1298, which extends the ag exemption to using land for wildlife management. We also buy hunting and fishing licenses with so many stamps on them that you can barely read whose license it is. We also donate to other wildlife-related causes and organizations. And, most of us have so many conservation prints that we could open a gallery.

Furthermore, let me remind everyone that our name is the Texas Wildlife Association. We are not the Texas Extinction Association nor the Texas Bullseye Association. We ain't Bubbas for Bigger Bullets.

We basically have no problem with the spirit of the ESA. We feel that we should protect endangered species and their ecosystems. We should not be responsible for causing species that took eons and eons to evolve to disappear—forever. We believe that if, through fate or fortune, you find yourself blessed with defending an endangered species of plant or animal—then you have an obligation to mankind to be the best steward you can be. If some plant or animal draws a line in the sand, we should be on its side in the fight.

Fine. So what's the problem? The problem is that what should be happening isn't. The Endangered Species Act is being used by some people and by some organizations to promote their own limited agendas. Let's explore some of these abuses.

First, some folks are using the ESA to stop projects that they don't like. I'll grant that some might need to be stopped. But should a radical minority use the ESA to stop a cross-fencing plan? Should someone be allowed to stop you from building a bass-fishing lake (or pond or tank) on your hunting lease? Should they be allowed to keep you from clearing a piece of brush to establish a food-plot for wildlife? What if you couldn't build a house where you wanted to? Or a barn? Or, if your kids couldn't build a house on their own property? Should the ESA be used to stop these kinds of projects? Some tough questions.

The second problem TWA has with the ESA is that it's being used by those same uninformed to stop activities they don't like. Should a few of the naive be allowed to stop you from raising and grazing cattle on your ranch? Should someone who lives in Houston or Dallas (or Austin or Washington D.C.) be able to force you to stop running sheep and/or goats on a ranch in the Hill Country where they've been run since your great-great grandfather started doing that in the 1870's?

Is it right that the ESA is being used to stop research projects? What about stopping recreational activities? Should the anti-hunting minority be allowed to use the ESA to stop hunting? Not just stopping the hunting of specific, endangered species but in stopping hunting in general? More tough questions. But the act is being used to stop these sorts of activities.

All this leads to the final problem TWA has with the ESA. (At least that I'd like to discuss in this article.) And it's the most serious. The act is being used as a land acquisition tool. Here's how that works.

Let's assume that you own some land and that in order to meet the financial obligations associated with that land—you run a few cows, lease the hunting rights and charge a reasonable daily rate to fish in your tank. Maybe you live on that income and maybe you don't. But you need it, at least, to pay taxes, insurance, maintenance, and repairs to road(s), fence(s), barn(s), pens(s), etc., etc.

Then comes the discovery and listing of endangered species in the next county that require the same type of habitat you have for that species to survive. (Remember back at the first when we discussed how most of us would want to help?) Next thing you know, though, hunting is restricted or stopped completely. Then grazing by livestock is banned. Now how much is the land worth? What if you have a note on it? Tell your banker that endangered species are bankrupting you.

The mere discovery of endangered species has devalued your land by potentially limiting the activities in which you can engage and/or the scope of projects you can undertake. Along comes a "conservation" organization and offers to buy you out of your misery at the now-deflated value. So you reluctantly agree to sell. Then a group of "investors" buys out the "conservation" group at a profit so they can offer the same good deal to your neighbor. Next a government entity condemns the land as critical habitat and buys out the "investors," also at a tidy little profit.

At that time they raise our taxes to by your land. Of course, that takes it out of the tax base, thereby forcing an additional tax increase. Then, finally, there's a neat, new government-owned piece of land that needs a superintendent, rangers, secretaries, security, trucks, computers, janitors, etc., which creates another bump in our taxes.

Amazing, isn't it? Endangered species have just been converted into government holdings. Endangered species means limiting activities and devaluing land so it can end up in government hands from unwilling sellers. And, we all pay for this little sleight-of-hand at every step of the way through increased taxes.

Moreover, all this comes from a government that wants to spend hundreds of millions of dollars in Travis County to "protect" the same bird they kill in their fruit-fly eradication assistance program in Guatemala. The very same government that tells you to cut cedar in its erosion-control program and then throws you in jail for doing so because cedar is critical habitat for the aforementioned bird.

What does all this have to do with saving something from becoming extinct? Very damn little. The Endangered Species Act is being misused by the misguided few in ways that have little or nothing

(See SENDERO on Back Page)

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(SENDERO Cont. from Page 19)

to do with saving anything. Those species that need help don't get it. In most cases, the critters end up catching all the blame and wind up at the bottom of the priority list.

An endangered creature would have no stronger allies than my family and friends. If some plant or animal chose our land as its last stronghold—we'd go to the wall defending and nurturing it until we won. But, we ain't gonna do that if we're forced to sell the land at an unfair price and suffer tax increase after tax increase.

Well, I ought to start my rounds on the back sendero. I need to feed my three-headed skunks. One of the females ("Molly") is showing signs and I want to make sure those young'uns come into the world without complications. ("Breech" means something entirely different with these animals.) I should probably also go by and make sure the deer aren't eating too much of the fucia slime that grows on the southeast shoreline of the big tank. It makes 'em a little crazy. I've thought about showing the skunks and the slime to my friends. But, maybe I'd be better off keeping this to myself. And, right now at least, so will the critters.

ALONG THE BACK SENDERO

from 7/93 Texas Wildlife

David K. Langford

Well, it has now begun. The events surrounding the re-authorization of the Endangered Species Act of 1973 are gearing up. Joy to the world.

Some of the first Congressional hearings are scheduled for San Marcos and San Antonio on July 6, 1993. No one bothered to "officially" notify your Texas Wildlife Association. Nobody "officially" asked me personally, either. How 'bout you? Did you get your invitation to testify? Did you see anything in your newspaper? TV? Radio? Anything fishy here? Read on.

I decided to check out the tip I'd received—hot off the rumor wire—concerning these then-supposed hearings. It seemed logical that the experiences of the controllers of most of the wildlife habitat in Texas (through outright ownership, leasing, educating, researching and/or consulting) would be highly sought-after information. Those with the most "hands-on" expertise in actually providing for and nurturing habitat for wildlife—endangered or not—would make valuable resource witnesses for these honorable decision-makers. Silly me for having such thoughts.

Several phone calls to several staffs of the U.S. Congresspersons potentially involved in the hearings revealed that they didn't know anything about any such hearings, either. Or, if they did—they weren't talking. They had their story and they were stickin' to it. Finally, after about a week or so of sniffing around, I found someone both knowledgeable and helpful.

Linda Collinsworth, of U.S. Congressman Greg Laughlin's office, assured me that our request to be involved would be given consideration. BUT (. . .get ready . . .) that they already had so many groups *scheduled to testify* that she doubted there would be time for your TWA. Excuse me? No one knew anything about anything, but the dance cards were already full?

She suggested I write a letter to Congressman Laughlin so we could be put on the list of those still wishing to testify. Excuse me again? While the others' stories were that the airport had yet to be built—now there's already a full plane *and* a standby list?

So my next chore was to find out who the lucky ticketholders were.

At least this was somewhat easier than ferreting out details of the episodes themselves.

Update! Due to the efforts of U.S. Congressman Greg Laughlin, D-West Columbia, your TWA has been added to the list of testifiers. Please help extend our thanks to Congressman Laughlin.

Christine Ritter, also of Congressman Laughlin's staff, provided the identities of the nine testifiers at the San Marcos hearing. They are . . .the envelope, please: a homebuilder, someone from the Victoria Chamber of Commerce, a Williamson County official, a shrimper, a cattleman, *two* Sierra Clubbers and *two* Audubboners. (I promise I'm not making any of this up.) The participants in the San Antonio proceedings match this lineup plus some local politicians.

What a dandy list of experienced, wildlife-habitat providers. I'da never thought of it. Instead, I might've selected at least one (or more) of the probably half of our TWA membership that each, individually, conserves and manages more acres for wildlife than all nine of those entities put together. Put together and then multiplied by a medium-large number. (With the possible exception of the cattleman.)

But, we still would like to participate. We all want to help and feel we have practical experience and knowledge to contribute. My/our letter was sent and is reprinted herewith.

June 10, 1993

The Honorable Greg Laughlin
102 N. LBJ
San Marcos, TX 78666

Dear Congressman Laughlin:

The Texas Wildlife Association respectfully requests permission to testify regarding the Endangered Species Act on July 6, 1993, in San Marcos, TX. We also wish to be involved in any subsequent proceedings involving the ESA during the reauthorization process.

We have discovered in past ESA controversies that the term "landowner" is commonly misconstrued, and that the landowner's point of view is represented only by "developer" ioterests.

The TWA represents the owners of millions of acres of wildlife habitat in Texas. Because of private ownership, and a long-established tradition of leasing for wildlife-associated recreation, the wildlife values on these properties represent a significant portion of the income from them. For this reason, our landowner-members have no desire to build apartments or shopping malls, or to plant cotton fields, on their land. This important distinction has been completely ignored.

Incredibly, the very people whose fervent desire is to maintain habitat for all forms of wildlife are universally left out of the debate over the ESA. No wonder the Act is a failure. by whatever standard one wishes to apply!

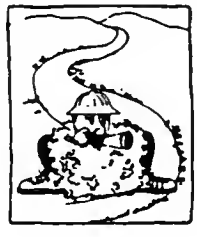
We feel that our position—and the position of the vast majority of landowners, who prefer not to subdivide or strip mine—has gone unheeded long enough. The interests of those who can be of the greatest help to endangered species must be included.

Thank you.

Yours for a clean
and enjoyable outdoors,
David K. Langford
Executive Vice President

cc: The Honorable Jack Fields
The Honorable Solomon Ortiz

I think I'll wait for my reply out on the back sendero. Out there where all the wildlife lives. Sometimes wandering around in the brush makes finding solutions a little easier. Maybe I can figure out why most of the decisions involving ecosystem conservation are made without any input from the King Ranches, Y.O. Ranches, Hillingdon Ranches, Slator Ranches, San Pedro Ranches, Fennessey Ranches, Tule Ranches, Tecomate Ranches, Circle Ranches, HK Ranches, etc., etc., etc. and etc. of the world. It seems rather peculiar to me that such judgments on wildlife and habitat are rendered only on the questionable conclusions of bureaucrats, fund-raising entities, and golf-course builders.



Texas Organization for Endangered Species

P.O. Box 12773
Austin, Texas 78711

The following comments concerning reauthorization of the Endangered Species Act are submitted to the United States House of Representatives Merchant Marine and Fisheries Committee's subcommittee on Natural Resources and the Environment by the Texas Organization for Endangered Species (TOES). These comments are offered during the extended public comment period associated with two Field Hearings held in San Marcos and San Antonio, Texas, on July 6, 1993.

OVERVIEW

TOES supports the original intent of the Endangered Species Act and strongly urges reauthorization of this legislation for five years. TOES supports House Bill 2043 authored by Congressman Gerry Studds. Our comments following will address the need for conservation of biological diversity and will address some key issues to be considered during the reauthorization proceedings, including:

*Improving the status survey and recovery planning process
*Initiating proactive conservation efforts
*Implementing ecosystem-level, multiple-species conservation
*Addressing concerns of private landowners
*Increasing public awareness and involvement
*Allocating funding levels necessary to implement these actions effectively

NEED FOR CONSERVATION OF BIOLOGICAL DIVERSITY

Species extinction is not a new phenomenon; however, scientists are unanimous in the view that man has rapidly accelerated the loss of species over the last 200 years. Recognition of that fact and that species have "aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people" (ESA 1973) led Congress to adopt the Endangered Species Act in 1973 and maintain it for the past 20 years. As a result, several species have been brought back from the brink of extinction, including the Bald Eagle, our national bird. A recent report by the U.S. Fish and Wildlife Service noted that most of the species originally listed as threatened or endangered in 1967 have stabilized or increased in population. Despite those successes, the challenges to conserving the unique plant and animals species of the U.S. continue to increase. Some sobering facts are:

* At least 500 species and subspecies of plants and animals are known to have become extinct on the North American continent in the last 300 years.
* Before 1900 three animals species are known to have become extinct in Texas. From 1900 to 1959 four animal species disappeared from the state. Since 1959 ten species are known to have become extinct in the state.

* Many U.S. botanists believe, according to a survey, that within the next five years 253 U.S. plants face a real risk of extinction.
* Scientists believe that 1 of 10 plant species in the world contain compounds with ingredients that might prove active against cancer.

* At the current rate, it will take 50 years to assess the status of all U.S. species presently considered to be in danger of extinction in the U.S.
* By the year 2050, 25% of the Earth's species could be extinct.

* At least 425 species of plants and 60 species of vertebrate animals occur nowhere in the world outside the state of Texas.
* Approximately 85 Texas plants and 85 Texas animals are known to occur in 5 or fewer locations in the world.

* Tourism, much of it natural resource-related, is the third biggest industry in Texas. In addition, Texas has the second-largest tourism industry in the country.
* Approximately 70,000 people per year visit the central Texas coast for the purpose of visiting conservation areas for the endangered whooping crane. Over $1.4 billion is spent annually on wildlife-watching activites in Texas.

* Current annual Endangered Species Act funding ($40 million) is equal to the amount of money residents in Washington, D.C., spend annually on Domino's Pizza.
* Current annual Endangered Species Act funding is equal to the cost of 3 miles of federal highway.

It is ironic that as society is increasingly benefitting from scientific discoveries yielding new uses for biological diversity, this diversity is under increasing threat. While the situation is especially grave in the tropics, we here in the state of Texas are also confronted with significant losses. The Endangered Species Act is an enlightened piece of legislation aimed at stemming the impending tide of species' extinction. This is not because the designers of the Act aimed to put the interests of lowly plants and animals before those of humans, but because they appreciated the fact that the welfare of all plants and animals is inextricably linked to that of human beings as well.

KEY ISSUES TO BE CONSIDERED

STATUS SURVEYS AND RECOVERY PLANNING

Only through application of the most sound scientific research can a solid basis for recognizing imperiled species and pursuing appropriate recovery actions be built. Listing decisions should continue to be based only upon the biological status of the species. Funding for status surveys should be increased to insure that the best data is collected and that the most advanced methods of collecting data are incorporated where appropriate. The recovery planning process should be enhanced to provide measurable results. Timelines should be established that will insure completion and implementation of recovery plans. Increased funding should be available to ensure that scientists and other experts are included in the recovery planning process. The high priority actions that are recommended in recovery plans should receive high level consideration, whether they call for funding, regulation, or cultural change.

PROACTIVE CONSERVATION EFFORTS

The ability to prevent species reaching critically low numbers should be enhanced in the Endangered Species Act. It is easy for opponents to claim that the ESA does not protect species until they are on the brink of extinction. The reality is that priorities have had to be set to expend historically very limited resources. Budgetary constraints have forestalled efforts to implement the ESA for any but the most endangered (and popular) of species. As a result, many species, both listed and unlisted, have continued to decline, resulting in greater regulatory and recovery costs to society.

ECOSYSTEM AND MULTIPLE-SPECIES CONSERVATION

The Endangered Species Act of 1973 recognizes the importance of conserving endangered species through conservation of intact ecosystems. Habitat conservation plans (HCPs) as prescribed in section 10 of the ESA are one of the most effective ways to address needs of many species at one time. Federal funding, through grants or loans, to support the development and implementation of (HCPs) has been vacuous. Congressman Studds' bill calls for $20 million to be reserved in a revolving fund to be made available to the States for loans and grants to implement HCPs. TOES supports an initial appropriation of $20 million for this aspect of ESA implementation. HCPs, as currently prescribed in the ESA, provide for ecosystem protection in a preventative manner while allowing development of surrounding areas to proceed. The HCP process will provide opportunities for conservation of listed and candidate species in a proactive, rational, predictable, publicly-determined, biologically sound, and ecosystem-based manner.

PRIVATE LANDOWNER CONCERNS

Another very critical aspect of protecting endangered species, especially in Texas where private landowners control over 95% of all property, is the perceived conflict of private landowner rights with the ESA's intent to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." Many argue that the restrictions placed on land use by implementation of the ESA constitutes a take of private property rights. Although TOES does not support monetary compensation for every contrived use of land that may be restricted by implementation of the ESA, the organization does envision that landowners who provide habitat for endangered and threatened species should be rewarded, not penalized, for their responsible stewardship. Tax law revisions or the development of complementing programs with agriculture should be examined thoroughly with objective reviews of all alternative courses of action. Subsidies similar to agricultural land use incentives would be very useful in encouraging voluntary endangered species conservation and could perhaps lead to recovery and delisting. Such conservation efforts, if the subsidies were extended to candidate species, might forestall the necessity to list many species by increasing habitat quality or quantity.

PUBLIC EDUCATION AND INFORMATION

TOES has witnessed over the past two decades that endangered species issues in Texas have simmered during the "scientific" phase of research and investigation and then boiled over during the "political" phase of court battles, legislative debate, and setting of public policy. Funding lagged woefully behind during the scientific phase (status surveys, recovery plans, biological and management research) and then skyrocketed during the political phase (court costs, lobbying efforts). Misinformation (from naive and intentional sources) has bred fear and mistrust, particularly of the federal agencies. There is an urgent need to gather scientifically sound data, inform the public of the status of the natural heritage of Texas, and provide the citizens of Texas with adequate information with which to make sound objective decisions. Protecting endangered species is not an either or choice. We can protect endangered species, private property rights, development potential, and economic prosperity through rational informed actions. Any action to improve the educational and awareness level of Texans with regard to endangered species conservation is supported by TOES.

FUNDING

Funding is the critical element of ESA implementation. Although Texas has seen significant increases in staff levels for the U.S. Fish and Wildlife Service (USFWS) and increased support of Texas Parks and Wildlife Department through the Section 6 Agreement with USFWS, these funding levels are insufficient to reduce the backlog of Texas candidate species awaiting listing decisions, provide adequate information and support for the development and implementation of status surveys and recovery plans, and ensure adequate habitat protection. The National Marine Fisheries Service is also in need of increased funding to respond to its marine species protection mandate. These agencies, as well as other federal

agencies with land management authority and responsibility (U.S. Forest Service and National Park Service), and those with regulatory and educational mandates (Environmental Protection Agency and Soil Conservation Service), should receive funding levels to provide staff and resources that will increase their stewardship, resource protection, and education/outreach capabilities. In our view funding of over $100 million annually are necessary to achieve the objectives of the ESA.

SUMMARY

Trying to hold the line against loss of biological diversity is a formidable task, but the Endangered Species Act is a powerful tool in that effort. Through reauthorization and adequate funding of the ESA Congress can ensure that listing and recovery actions are based on sound science, that private landowners receive positive incentives for good stewardship of endangered species, that recovery costs are reduced through proactive conservation and ecosystem-level conservation, and that the American public is aware of and involved in the conservation effort. TOES believes that House Bill 2043 is the best legislative framework to achieve these objectives and will work with the Texas leadership to provide further input.

Texas Organization for Endangered Species (TOES) has the longest history of any non-governmental Texas organization in the arena of endangered species conservation. TOES was begun on April 5, 1972 as a concerned group of zoologists, botanists, ecologists, and other interested individuals, including private landowners, to promote endangered species conservation when the federal and state governments were just beginning to wrestle with the issues. The TOES lists of animals, plants, biotic communities, and invertebrates have historically led the way as forums for discussion and consideration of the status of rare and declining species and communities in Texas. Until the implementation of the Texas Natural Heritage Program, TOES provided the only concerted effort aimed at understanding the status of Texas biodiversity.

TESTIMONY

ON BEHALF OF

THE TENTH DISTRICT FEDERAL LAND BANK ASSOCIATIONS
AND
THE FARM CREDIT BANK OF TEXAS

REGARDING
REAUTHORIZATION OF ENDANGERED SPECIES ACT

07/01/93

My name is Mike Dail and I am president of the Federal Land Bank Association of Mason, Texas. I am a third generation member of the Farm Credit System and a second generation employee of the System. My family has been ranching in Texas for well over 100 years. The FLBA of Mason serves a three-county area in the Texas Hill Country. Like other Federal Land Bank Associations in the Tenth Farm Credit District, we are the lending arms of the Farm Credit Bank of Texas that is headquartered in Austin, Texas. The Farm Credit Bank of Texas, in turn, is part of the cooperative Farm Credit System that serves the needs of American agriculture. The Farm Credit System has in excess of $62 billion in loans outstanding to approximately 600,000 members/borrowers. We are the largest single provider of financial services to agribusiness in the United States. The Tenth Farm Credit District is presently serving over 52,000 members/stockholders with total loans outstanding in excess of $3.5 billion.

Federal Land Bank Associations make loans to purchase rural property, refinance existing mortgages and other debts, make land improvements, purchase livestock and equipment, as well as provide funds for other agricultural needs. All loans are secured by first liens on the property. Thus the value of the farm or ranch is of paramount importance to both borrower and lender.

That value, in turn, is largely dependent on the reasonable expectations of being able to put the property to uses that justified the purchase of, investment in, taxation on and retention of, the land to begin with. In other words, a property right does not equal mere title; it is more than fee ownership. Property rights include the right to use and dispose of land insofar as such activity does not harm others. Clearly, the value of such rights depend on the degree to which the tenure is secure. Without such security, people would soon cease buying property, caring for property and paying taxes on property (the revenue from which, incidentally, provides the bulk of a community's public services).

07/01/93

If private property values were to shift so as to become liabilities instead of assets, there would be no incentive to own private property, nor to provide the tremendous quantity and quality of goods and services that have made the people living in the United States the wealthiest and healthiest in all the world.

The only likely way that we might, in the foreseeable future, deplete or fail to renew our natural resources, would be through regulation - not resource exhaustion, nor unsustainable population growth. The increasing need to provide the food, clothing and shelter in the United States and the world will not be met if producers are deprived of the right to work our land and use our resources. The Endangered Species Act poses a very real and serious risk of depriving such rights.

The Endangered Species Act presupposes that landowners have harmed someone, and therefore seeks to deprive landowners of their property rights. That Congress has declared non-human species to be of "incalculable" value, without evidencing that value, is a grave threat to rural landowners and their lenders alike. Especially since that declaration prompted the Supreme Court to pronounce that "the plain intent of Congress was to stop extinction, whatever the cost".

As a lender, we must make and maintain loans in a secured property and that is the primary basis of concern with the Endangered Species Act. We have witnessed a significant decline in agricultural values across the nation as a result of the application of the Endangered Species Act. The act must be reformed to better protect private property

rights and ensure that economic considerations are taken into account when determining how - and whether - to protect an endangered species (plant or animal).

The Tenth Farm Credit District, which serves the many credit needs of American agriculture in the states of Alabama, Louisiana, New Mexico, Mississippi and Texas, strongly supports H.R. 1490 which has been introduced by Rep. Tauzin (D-LA) and Rep. Jack Fields (R-TX) and is supported by a broad base of their bipartisan colleagues from all areas of the country. This reform legislation is by no means reactionary, in fact it seeks to reaffirm the current laws' fundamental goal of conserving endangered and threatened species, while incorporating into this laudable process, a balance between species conservation requirements and economic and social needs of the local community.

Thank you for the opportunity to present the views of a lender whose very life blood is tied to the success or failure of the farmers and ranchers of rural America.

07/01/93

TRANS TEXAS
HERITAGE ASSOCIATION

P.O. Box 1209 Alpine, Texas 79831 Telephone: (915) 837-3461 FAX: (915) 837-7425

TESTIMONY

OF

THE TRANS TEXAS HERITAGE ASSOCIATION

REGARDING S. B. 880

BEFORE THE

SENATE NATURAL RESOURCES COMMITTEE

APRIL 19, 1993

My name is Topper Frank and I am from Van Horn, Texas. I appreciate the opportunity to testify today before this committee on behalf of the Trans Texas Heritage Association. I currently serve as President of the Trans Texas Heritage Association and represent its members who own more than 13 million acres of privately owned land in Texas.

I am here today in opposition to S.B. 880.

Although on its face S.B. 880 appears fairly straighforward, it encompasses enormous complexities, uncertainty and controversy. The Endangered Species Act of 1973 (ESA) is broken. Because of its almost total inflexibility, it is frequently called a "pit bull of a law" and has now created endless controversy in almost every state and region of the nation. I say the ESA is "broken" because its application as an almost limitless land use law is costing countless jobs and loss of property values and rights from Seattle to Miami. Worse yet, it is not accomplishing its goal of recovering species to the point they can be removed from the list. With over 700 species now listed as endangered or threatened, fewer than a dozen have been removed from the list as recovered. Those few species recovered on their own, not as a result of any governmental action. The ESA is due for re-authorization this year and almost certainly will be amended by Congress given the controversy surrounding it.

Under the ESA it is unlawful to kill or harm endangered species. The federal courts have defined "harm" to include the adverse modification of habitat upon which listed species depend.1/ In an effort to ease some of the burdens imposed on people and economies by the ESA, Congress amended it in 1982 to provide for Section 10(a) which permits the incidental "take" of listed species. The general theory behind the Section 10(a) process is that some members of a species can be lawfully "taken" by federal permit in exchange for money and property dedicated by the permittees to the U.S. Fish & Wildlife Service or state agencies. The basic vehicle to serve as a foundation for the issuance of 10(a) permits is the Habitat Conservation Plan (HCP).

This then is the basis for the bill you are considering today. Without discussing the many ramifications of ESA Sections 7 and 9 upon which Section 10(a) hinges, I will attempt to outline something of the history of failings of Habitat Conservation Plans around the nation and some of the reasons they have proved unworkable and impractical.2/

The first HCP was established in Northern California and served as the Congressional model upon which the Section 10(a) amendment to the ESA was enacted. The San Bruno Mountain HCP was the result of a decade-long fight between a proposed development project and two species of butterflies. Like most HCPs, the San Bruno case primarily involved developers who could afford to dedicate a significant portion of the proposed development property to a butterfly preserve.3/ In addition, a commitment was made by the developers to fund conservation efforts for the butterflies by the imposition of development fees. This process, now incorporated into all HCPs, has become known as "greenmail". In other words, if a property owner desires to adversely modify the habitat on his own property, he is required to set aside other property in perpetuity for the preservation of the species. This is usually accomplished by conveying that property to

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the federal government or a state agency. Typically, the amount of land required to be set aside exceeds the development property by a ratio of ten or twenty to one. In addition, the permittee is required to provide means of assurance of funding the preserve's needs. These fees frequently total in the millions and tens of millions of dollars.4/

Even in California where the development community is accustomed to the highest development fees in the nation, strong resistance to HCP development fees is being met. Incidentally, these fees are passed on to the ultimate homebuyer whose costs are independently skyrocketing due to greatly increased lumber costs resulting from the impacts of the threatened northern spotted owl on the timber industry.4/

Of the many HCP efforts that have been undertaken, only a few have even moderately succeeded. One of the problems increasingly encountered is the inability to take into consideration species which might be listed in the future. There is no incentive for developers to participate in the HCP process absent an assurance that they will be protected from prosecution of a "take" of a species. In some HCP efforts an agreement has been reached between the HCP participants and the USFWS that the "take" of future listed species will not result in prosecution. However, the courts are increasingly holding that a public agency may not contractually restrict its future exercise of authority.6/ The usefulness of the HCP process is greatly reduced or eliminated if the permittee cannot be assured he will not be subject to future criminal sanctions as additional species are listed.

Of the few HCPs which have reached a conclusion, all have required years to conclude. This seems to be a function of the number of participants and interest groups involved. A review of the many failed HCPs reveals that large numbers of participants almost predict a failed effort. Again, individual landowners who are not members of the development community are likely to be omitted from the process. However, they are

directly affected by the outcome. As a practical matter, the sheer expense of participating in the HCP process eliminates all but the heavyweights, leaving the the small property owners at the mercy of those who can afford to participate.

Most of our members are owners of small properties. They are not developers nor do they have a realistic voice in a local bond election. Many own small farms and ranches where they have worked and lived a lifetime. They are the losers in the HCP process.

Aside from the many shortcomings of the HCP process, S.B. 880 is a bill designed to remedy the absence of legislative authority for mitigation fees and the absence of a regional planning agency with authority to implement an HCP. However, S.B. 880 may raise more questions than it answers. For example, the bill authorizes the regulation of conduct in the habitat preserves which is inconsistent with the preserve purposes. This provision leaves much to be interpreted. Also, Section 83.016 of the bill authorizes fees to be assessed against "any development". Our members wonder if an addition to an existing barn is "any development".

The bill is silent regarding the use of condemnation powers in connection with mitigation. Therefore, we must assume that governmental units involved with HCPs will not be limited in their use of eminent domain powers. Serious abuses of eminent domain powers in connection with mitigation have arisen in other jurisdictions. In one California case a flood control district condemned land more than one hundred miles away from the project in order to mitigate endangered species habitat at the projects location[7/]

I have attempted to outline in very brief form some of the reasons this committee should not vote favorably on S.B. 880. A measure involving the complexities of HCPs

should be carefully studied before any action is taken on it. The Trans Texas Heritage Association will be pleased to provide additional information regarding Habitat Conservation Plans should this committee desire such information. I may be reached at (915) 837-3461.

Mr. Chairman and members of the committee, our members appreciate the opportunity to express our deep concerns about S.B. 880.

1/ Palila v. Hawaii Department of Land and Natural Resources, 471 F. Supp. 985 (D. HA 1979), aff'd 639 F. 2d 495, 9th Cir. 1981)

2/ Section 7 of the ESA prohibits a federal agency from authorizing, funding, or carrying out any action unless it can insure that the action (1) is not likely to jeopardize the continued existence of any listed species and (2) is not likely to result in the destruction or adverse modification of critical habitat. This provision triggers Section 7 formal consultations.

3/ See: Marsh & Thornton, *San Bruno Mountain Habitat Conservation Plan*, in MANAGING LAND USE CONFLICTS, 114 (C. Brower & D. Carol, eds.1987)

4/ 16 U.S.C.A. Section 1539(a)

5/ Habitat Conservation Conservation Plans, ENVIRONMENTAL LAW REVIEW, Northwestern School of Law of Lewis and Clark College, Vol. 21, No. 3, Part 1

6/ ibid

7/ Kenneth Mebane, Kern County, CA

Bill Aleshire
COUNTY JUDGE, TRAVIS COUNTY

Travis County Administration Building
P.O. Box 1748 Room 520
Austin, Texas 78767
512 473-9555

TESTIMONY OF COUNTY JUDGE BILL ALESHIRE
SB 880
April 19, 1993

SB 880 IS A PRACTICAL ANSWER TO A COMPLEX ENVIRONMENTAL AND ECONOMIC DILEMMA WE FACE IN TRAVIS COUNTY. I FIRST BECAME AWARE OF THE IMPLICATIONS OF THIS DILEMMA WHEN THE COUNTY WAS PROHIBITED FROM REALIGNING THE INTERSECTION OF COMANCHE TRAIL AND RM 620 TO RESOLVE A TRAFFIC SAFETY PROBLEM BECAUSE IT REQUIRED THE DESTRUCTION OF SOME OF THE HABITAT OF THE BLACK-CAPPED VIREO, AN ENDANGERED SPECIES. COMANCHE TRAIL FROM RM 620, IS THE ROAD LEADING TO THE OASIS RESTAURANT, BOB WENTZ PARK AT WINDY POINT, AND HIPPIE HOLLOW, ALL POPULAR PLACES FOR SWIMMERS, WINDSURFERS, SUNBATHERS AND GAWKERS. THE COUNTY'S PROBLEMS WITH THAT ROAD PROJECT WERE JUST A MINUSCULE PORTION OF THE ENVIRONMENTAL AND ECONOMIC PROBLEMS WHICH HAVE DEVELOPED IN OUR COUNTY.

DEALING WITH THIS SITUATION AS COUNTY JUDGE, I'VE BEEN ANGRY, FRUSTRATED, INDIGNANT, BUT DETERMINED TO FIND A SOLUTION THAT WILL WORK. I FELT THAT THE FEDERAL TREASURY OUGHT TO PAY FOR THE IMPLEMENTATION OF THIS FEDERAL LAW, NOT MY COUNTY OR CITY TAXPAYERS. I HAVE BEEN FRUSTRATED ABOUT THE WAY IN WHICH THE ENDANGERED SPECIES ACT IS APPLIED, THOUGH I STRONGLY SUPPORT THE CONSERVATION OF OUR ENVIRONMENT.

IN SHORT, I HAVE BEEN A 'HARD SELL' ON THE BALCONES CANYONLANDS CONSERVATION PLAN, OUT OF CONCERN FOR ITS PRACTICALITY AND AFFORDABILITY. I'VE STUDIED THE THEORY, THE LAW, THE FINANCES, AND THE BIOLOGY OF THIS PLAN, PAYING ATTENTION APPROPRIATELY TO THE DETAILS.

LEARNING WHAT I HAVE LEARNED AND FACING THE REALITY OUR LANDOWNERS IN TRAVIS COUNTY MUST FACE, I'M HERE TODAY AS A STRONG ADVOCATE FOR SB 880 AND A HABITAT CONSERVATION PLAN FOR TRAVIS COUNTY. THIS LEGISLATION HAS THE UNANIMOUS ENDORSEMENT OF THE TRAVIS COUNTY COMMISSIONERS COURT. FOR ALL THE LEGITIMATE COMPLAINTS THERE MAY BE ABOUT WHY WE ARE IN THIS SITUATION OR WHAT THE FEDERAL GOVERNMENT SHOULD DO DIFFERENTLY, WE MUST FIND A PRACTICAL SOLUTION AND REACT TO THIS SITUATION AS A COMMUNITY. THAT'S WHAT SB 880 ALLOWS US TO DO. THIS BILL IS SIMPLY PERMISSIVE AND PRACTICALLY WILL APPLY ONLY TO MY COUNTY.

MOST OF THE WESTERN PART OF OUR COUNTY HAS BEEN IDENTIFIED AS POTENTIAL HABITAT FOR ENDANGERED SPECIES, AND AS A RESULT, LANDOWNERS ARE PROHIBITED BY THE FEDERAL ENDANGERED SPECIES ACT FROM DISTURBING THIS

HABITAT UNLESS THEY CAN PROVE THAT THEY CAN DO THAT WITHOUT HARM TO THE ENDANGERED SPECIES THROUGH WHAT IS CALLED A HABITAT CONSERVATION PLAN.

BUT THE COST OF SUCH A PLAN TO MOST INDIVIDUAL LANDOWNERS IS PROHIBITIVE. SMALL ACREAGE LANDOWNERS IN PARTICULAR ARE HARD HIT BY THIS SITUATION. AS A COMMUNITY, OUR TAX BASE IS IN JEOPARDY AND WE EXPECT TO SUFFER ECONOMIC LOSS IF THIS DILEMMA IS NOT RESOLVED.

THEREFORE, WE'VE WORKED TO DEVELOP A SINGLE PLAN TO GET ONE COUNTYWIDE PERMIT THAT WOULD PROVIDE HIGH QUALITY HABITAT IN A PRESERVE FOR THE SPECIES WHILE FREEING OWNERS OF THE REMAINING LAND FROM THE REGULATORY RESTRICTIONS OF THE ENDANGERED SPECIES ACT. WHILE WE ARE RELUCTANT TO SEE PRESERVE LAND TAKEN OFF THE TAX ROLL, THAT LAND AND QUITE A BIT OF WESTERN TRAVIS COUNTY WILL DECLINE IN TAX VALUE WITHOUT A HABITAT CONSERVATION PLAN ALLOWING BOTH THE PROTECTION OF THE SPECIES AND THE DEVELOPMENT OF REMAINING LAND.

THAT'S WHAT SB 880 MAKES POSSIBLE. THE CITY AND TRAVIS COUNTY WILL OBTAIN A FEDERAL PERMIT FOR ALL OF TRAVIS COUNTY UNDER SECTION 10(A) OF THE ENDANGERED SPECIES ACT . IF VOTERS APPROVE COUNTY BONDS, AS DID THE VOTERS OF AUSTIN, TO PURCHASE THE PRESERVE LANDS, THEN A BUILDING PERMIT SURCHARGE WOULD BE USED TO PAY FOR THE ONGOING COSTS OF OPERATING AND MANAGING THE PRESERVE. THAT WAY, BOTH CURRENT RESIDENTS (THROUGH PROPERTY TAX-PAID BONDS) AND FUTURE GROWTH/DEVELOPMENT (THROUGH THE BUILDING PERMIT SURCHARGE) WILL SHARE THE COST OF THIS PERMIT. THE SURCHARGE IS NEEDED BECAUSE IT IS IMPORTANT TO TAKE CARE OF THE PRESERVES, MAKING THE PRESERVE HIGH-QUALITY HABITAT FOR THE SPECIES, IN ORDER TO KEEP THE PERMIT FROM U.S. FISH AND WILDLIFE, AND SO THE SPECIES WILL SURVIVE EVEN IF OTHER HABITAT LANDS ARE DEVELOPED FOR HOMES, ROADS, AND COMMERCIAL BUILDINGS.

WITH SB 880, WHEN THE PRESERVES ARE PURCHASED, LANDOWNERS IN TRAVIS COUNTY WILL BE FREED OF ALL RESTRICTIONS UNDER THE ENDANGERED SPECIES ACT FOR THE SPECIES COVERED BY OUR COMMUNITY PERMIT. WE COULD HAVE A HABITAT PLAN/PERMIT WITHOUT SB 880, BUT IT WOULD NOT ACHIEVE THIS RESULT.

REGARDLESS OF COMPLAINTS PEOPLE MAY HAVE ABOUT THE ENDANGERED SPECIES ACT, ITS APPLICATION, ITS LACK OF FUNDING, ETC., WE NEED A SOLUTION FOR OUR COUNTY TO THIS DILEMMA. KILLING SB 880 DOESN'T CHANGE THE FEDERAL ENDANGERED SPECIES ACT AND IT DOESN'T MAKE IT ANY EASIER FOR MY CONSTITUENTS TO COPE WITH THAT FEDERAL LAW. IN FACT QUITE THE OPPOSITE IS TRUE. SB 880 OFFERS A PRACTICAL WAY OF SOLVING THIS PROBLEM IN OUR COUNTY IN THE FORESEEABLE FUTURE, AND WE URGE YOU TO GIVE THIS BILL FAVORABLE CONSIDERATION.

Federal funds can't save BCCP from going 'foul,' Pickle warns

6/9/93

By Ralph K.M. Haurwitz
American-Statesman Staff

The Balcones Canyonlands Conservation Plan can be saved, but not with federal funds, U.S. Rep. Jake Pickle warned Wednesday.

"Any assumption that Uncle Sam can come in and bail out this process is fanciful thinking," the Austin Democrat said.

The Balcones plan would establish nature preserves in Travis County for endangered and rare songbirds, cave bugs and other species. Development would be allowed outside the preserves. A bill that would have authorized development fees for managing the preserves died last week in the Texas Legislature.

"Austin was on the verge of national recognition as the first major city to establish a workable environmental system under the Endangered Species Act. We were on the verge of hitting a World Series grand slam home run ... and we hit a foul ball," said Pickle, a proponent of the plan.

"The worst thing we can do is call it quits. The plan is still viable, still attainable."

Some proponents of the Balcones plan have suggested that the U.S. Fish and Wildlife Service could manage the preserves, at federal expense. Pickle said this would not be possible in the current budget climate, which he described as the tightest he has seen during his 29 years in Congress.

Pickle said community leaders must forge a new funding plan.

Officials of the government entities involved in overseeing the Balcones plan — Travis County, the City of Austin, the Lower Colorado River Authority, the Texas Parks and Wildlife Department and the U.S. Fish and Wildlife Service — have expressed optimism in recent days that alternative funding mechanisms that don't require legislative approval might be developed.

Pickle also called on local business, government and environmental leaders to "concentrate fiercely" on reaching an agreement resolving development and preservation issues along Barton Creek.

If such an agreement can be struck with Freeport-McMoRan Inc., the developer of Barton Creek Properties, it would then be possible to resolve the financial problems of the Southwest Travis County Road District No. 1, Pickle said.

That, in turn, would clear the way for public acquisition of two tracts crucial for the Balcones plan — the Uplands and the Sweetwater Ranch.

MORGAN, LEWIS & BOCKIUS

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July 19, 1993

Mr. Harry Burroughs
Committee on Merchant Marine
and Fisheries
1334 Longworth HOB
Washington, DC 20515

Dear Harry:

Enclosed is a brief summary of SB 1477, and a more extensive summary and analysis of SB 1477, The Edwards Aquifer authority legislation.

As we discussed, it would be appreciated if Congressman Fields would have these summaries made a part of the Record of the recent San Antonio hearing in accordance with the request of the City of San Antonio.

Thanks again for all your help.

Sincerely,

Stanton P. Sender

Enclosures

SUMMARY OF SB 1477

OVERALL SUMMARY

SB 1477 creates the Edwards Aquifer Authority, governed by a nine member board, with broad jurisdiction and power to manage the Edwards Aquifer. Existing users will obtain permits for annual withdrawals based upon historic use. The Authority will be financed exclusively by user fees; costs of additional water supplies will be financed by users requiring water for growth. The Authority will develop a comprehensive management plan for the region addressing future supply, prepare and implement a drought management plan and conduct research related to effective management of the Authority.

GEOGRAPHIC EXTENT

The Authority's jurisdiction extends in all or part of eight counties, including all of Bexar County, Uvalde County and Medina County and those portions of Comal, Hays, Guadalupe, Atascosa and Caldwell Counties that are either over the Aquifer or rely upon the Aquifer for water supply. The Authority has pollution control jurisdiction within a five mile buffer zone around its actual boundaries. The Act creates the South Central Texas Water Advisory Committee to advise the Authority on downstream issues. It is composed of members from the Aquifer region and counties downstream of discharges from the Edwards Aquifer.

COMPOSITION OF BOARD

The Board will consist of nine members, eight of whom are appointed by local elected bodies in the Aquifer region. The ninth member will be appointed by the South Central Texas Water Advisory Committee ("SCTWAC"). The Board will be balanced as follows:

Downstream interests (3 members):

- 1 - appointed by SCTWAC;
- 1 - appointed by Commissioner's Court of Comal County;
- 1 - appointed by City of San Marcos.

Agricultural interests (3 members):

- 1 - appointed by the Medina Underground Water Conservation District;
- 1 - appointed by Uvalde Underground Water Conservation District;

1 - rotating appointments among Evergreen Underground Water District (Atascosa County), Medina District, or Uvalde District.

Bexar County interests (3 members):

2 - appointed by the City Council of San Antonio;

1 - appointed by Commissioner's Court of Bexar County.

SOUTH CENTRAL TEXAS WATER ADVISORY COMMITTEE

The Act creates a twenty member South Central Texas Water Advisory Committee with the specific responsibility of interfacing with the Authority on issues relating to downstream water rights. Members are appointed by Commissioner Courts of affected counties and the city councils of Corpus Christi, Victoria and San Antonio.

GENERAL POWERS OF THE AUTHORITY

The Authority will have broad power to manage and protect the waters of the Edwards Aquifer. The Board may adopt rules to carry out its powers and must obtain compliance with permitting, metering and reporting requirements. The Authority may issue orders to enforce the legislation or its rules. As a political subdivision of the State of Texas, it will have the power to enter into contracts, to sue and be sued, own real property, exercise the power of eminent domain, and hold permits under state or federal law.

MANAGEMENT PLAN

The Authority will issue permits to existing users up to a total of 450,000 acre feet of total permitted use per year. The Authority shall reduce permitted withdrawals from the Aquifer to 400,000 acre feet within fifteen years. In consultation with state and federal agencies, these numbers may be increased if, through studies or project implementation, Aquifer yield is improved.

After September 1, 1993, withdrawals (other than from exempt wells) will require a permit. Permits will be based upon declarations of historical use, using the historical period of June 1, 1972 through May 31, 1993. The legislation contains minimum guarantees for irrigation users of two acre feet per acre for total irrigated acres in any one year and the average historical use by non-irrigation users. The Act provides for an interim authorization equal to this historic use pending permit issuance.

COMPREHENSIVE MANAGEMENT PLAN

The Authority must develop, by September 1, 1995, a comprehensive water management plan that includes conservation, future supply and demand management plans. This must include a twenty year plan for providing alternate supplies of water to the region with five year goals and objectives.

CRITICAL PERIOD MANAGEMENT PLAN

The Authority must prepare and coordinate implementation of a plan for critical period management on or before September 1, 1995. In essence, full regional authority will exist for effective critical period management.

CONSERVATION AND REUSE PLANS

The legislation authorizes the Authority to require all users to submit conservation and reuse plans in connection with permits. In the past, no regionwide mechanism existed for implementation of conservation and reuse planning.

FINANCES

The cost of management and operation of the Authority will be recovered through user fees; the Authority will have no taxing power. These user fees will be imposed upon Aquifer water users. Irrigation users will pay no more than twenty percent of the user fee for municipal use. The Authority may not impose user fees to develop additional water supplies.

PERMANENT REDUCTION IN PERMITTED AMOUNTS

The cost of reducing permitted withdrawals to 400,000 acre feet by the year 2008 will be borne equally between Aquifer users and water users downstream in the Guadalupe River Basin.

RESEARCH

The Authority must continue existing research and will have the power to conduct additional research related to all aspects of water management in the Edwards Aquifer region, including Aquifer yield improvement.

MEASURING DEVICES

All owners of permitted wells (those producing more than 25,000 gallons per day) must install and maintain measuring devices to indicate rate and cumulative amounts of water withdrawn by the well. The Authority is responsible for the cost of purchasing, installing and maintaining measuring devices for an irrigation well in existence on September 1, 1993.

EXEMPTION

Wells producing 25,000 gallons of water a day or less are exempt.

TRANSFER OF RIGHTS

The legislation requires that water be used within the boundaries of the Authority and that the Authority may by rule establish a procedure by which a person who installs water conservation equipment may sell the water conserved. Irrigation permit holders may not lease more than fifty percent of the irrigation rights initially permitted. The remaining fifty percent must be used in accordance with the original permit and must pass with transfer of the irrigated land.

EDWARDS UNDERGROUND WATER DISTRICT

The legislation repeals the statutes creating the Edwards Underground Water District and transfers all assets of the Edwards Underground Water District to the new Edwards Underground Authority.

OTHER UNDERGROUND WATER DISTRICTS

The Act recognizes the Medina Underground Water District and validates the Uvalde Underground Water District and allows them to operate consistent with the rules of the Edwards Aquifer Authority. The Authority may delegate some of its powers to the underground water districts operating under the Authority.

LEGISLATIVE OVERSIGHT

The Bill creates an Aquifer Legislative Oversight Committee composed of three members of the Senate and three members of the House. The Committee will report to the legislature on the effectiveness of the Edwards Aquifer Authority and the implementation of that Authority's enabling legislation.

GBRA SUNSET

The legislation sunsets the Board of the Guadalupe River Authority unless enabling legislation is enacted by the legislature in 1995.

Russell S. Johnson
Davidson & Troilo

SUMMARY OF SB 1477, THE EDWARDS AQUIFER AUTHORITY ACT

INTRODUCTION

In response to competing interests dependent on the Edwards Aquifer for water supply and resulting lawsuits which threaten federal intervention, the legislature recognized that the Edwards Aquifer is a unique aquifer and that a special regional management district is necessary to control the resources in order to protect terrestrial and aquatic life, domestic and municipal water supplies, the operation of existing industries, and the economic development of the state. The Act creates the Edwards Aquifer Authority, a conservation and reclamation district, that encompasses all or parts of eight Counties: all the areas of Bexar, Medina, and Uvalde Counties; a majority of the area of Comal County; and portions of Caldwell, Hays, Guadalupe and Atascosa Counties. The Authority is created under the Conservation Amendment of the Texas Constitution, Art. XVI, Sec. 59.

The legislation specifically points out that the ownership and rights of landowners are recognized and are not intended to be abrogated or contracts impaired by this legislation, subject to the rules adopted by the Authority. If any implementation of the legislation causes any taking of private property or impairment of contract as prohibited by the Texas and Federal Constitutions, compensation will be paid to that individual. The Authority's Board is appointed by local elected bodies, consists of nine members, and represents a balance among user interests.

The Authority is given expansive powers to protect the Aquifer, increase its recharge and prevent waste and pollution through implementation of plans and systems of permits managing withdrawals. The Authority's power is only over the underground water supply within the Aquifer region, and does not allow the Authority to regulate surface water. It also has specific power to enforce pollution control regulations throughout the area and in a buffer zone consisting of five miles beyond the area embraced by the Authority. This handout summarizes SB 1477, the Authority and its powers.

STRUCTURE AND POWER OF THE AUTHORITY

A. Board of Directors ("the Board")

The Authority will be governed by a board of nine directors to be appointed by the following governmental entities:

1. one at-large appointed by the South Central Texas Water Advisory Committee (a committee composed of 20 members, appointed by elected bodies from counties either over the Aquifer or downstream to the Gulf);

2. one Bexar County resident appointed by the Commissioners Court of Bexar County;

3. two Bexar County residents appointed by the City Council of San Antonio;

4. one Comal County or City of New Braunfels resident appointed by the Commissioners Court of Comal County;

5. one Hays County resident appointed by the governing body of San Marcos;

6. one Medina County residents appointed by the Medina County Underground Water Conservation District; and

7. one Atascosa, Medina or Uvalde County resident appointed by the Evergreen, Medina, and Uvalde County Underground Water Conservation Districts, respectively, and who will rotate terms.

The Board members will serve staggered four-year terms to expire June 1 of each odd number year, with 4 initial Board members serving only 2 years. Board members will not be compensated but will be entitled to reimbursements for expenses. Vacancies will be appointed by the governmental entity who appointed the Board member to serve the remaining term. No act of the Board will be valid unless adopted by the affirmative vote of a majority of the members.

B. South Central Texas Water Advisory Committee ("the Committee")

The legislation also creates a Committee which shall advise the Board on downstream water rights and issues. The Committee shall consist of twenty members appointed by the governing bodies of the following counties or cities:

1. Atascosa
2. Caldwell
3. Calhoun
4. Comal
5. DeWitt
6. Goliad
7. Gonzales
8. Guadalupe
9. Hays
10. Karnes
11. Medina
12. Nueces
13. Refugio
14. San Patricio
15. Uvalde
16. Victoria
17. Wilson
18. the city of San Antonio
19. the city of Victoria; and
20. the city of Corpus Christi.

Atascosa and Guadalupe counties cannot have a representative on the Committee when the County has a member on the Board, however.

The Committee members must be either a resident, qualified voter, or engaged in a business in the county included in the area of representation.

The Committee members will not be compensated, but will be reimbursed for their expenses. The Committee members will be informed of all communications given to the Board members, may participate in Board meetings to represent downstream water supply concerns, and assist in solutions to those concerns. However, the committee members will not be able to vote on a Board decision. The Committee does have the power to request the Board to reconsider any decision that is considered prejudicial to the downstream interest. If the reconsideration is not satisfactory to the Committee, the Committee may then request the Texas Water Commission ("the Commission") to review it and the Commission is obligated to review the Board's findings and make a recommendation. The Committee must submit a report assessing the effectiveness of the Authority and assess the effect on downstream water rights to the Commission and the Authority by March 31 of each even-numbered year.

C. General Powers of the Authority

The Authority's general powers are to ensure compliance with permitting, metering and reporting requirements as well as regulating water permits for the water users within the Aquifer area. The Authority has all powers necessary to manage and conserve the Aquifer, including all the powers granted districts under Charters 50, 51 and 52 of the Water Code. The Authority also has other general powers such as administering loans and other financial assistance for water conservation; water reuse; contracting, suing, receiving gifts and such; hiring personnel and delegating power to its employees; owning real and personal property; closing abandoned or wasteful wells; holding permits under the Endangered Species Act; and requiring certain water users to furnish well-driller logs to the Commission.

The legislation also provides that the Authority must make a good faith effort to award minority-owned and women-owned business contracts in an amount not less than 20% of its total contracts.

The Authority also has the power of eminent domain except, however, that it cannot acquire rights to underground water through this power. As a government entity, the Authority is subject to all open meetings laws and open records laws as well as being subject to review under the Texas Sunset Act.

REGULATORY POWER OF THE AUTHORITY

A. WITHDRAWALS

All withdrawal authorizations will take into account certain considerations such as protecting water quality of the Aquifer and surface streams, water conservation, maximizing beneficial use, protecting aquatic and wildlife habitat, and protecting threatened or endangered species. Annual permitted withdrawals will be limited to 450,000 acre-feet until December 31, 2007. Thereafter, the amount of permitted withdrawals must not exceed 400,000 acre-feet per year.

These limits may be increased if studies conducted or projects implemented by the Authority, in consultation with appropriate federal or state agencies determine that increasing permitted withdrawals is appropriate, or if the level of certain wells is above stated levels. No additional withdrawals will be granted unless the spring flows affecting the critical drought conditions are insured.

The Authority is also required to implement water management practices and procedures by June 1, 1994 that will insure that the continuous minimum spring flows of the Comal and San Marcos springs, by December 31, 2012, will protect endangered and threatened species as required by federal law. This program may be revised periodically by the Authority.

B. PERMITS

No one (other than an exempt user) is authorized to withdraw water from the Aquifer or begin construction of a well without obtaining a permit from the Authority. The Authority can issue three types of permits: (1) regular permits, (2) term permits, and (3) emergency permits. Each permit must specify the maximum rate and total volume of water that may be withdrawn in any one calendar year.

1. Regular Permits

Those entities or persons who are currently withdrawing water from the Aquifer can apply for an initial regular permit by showing a historical use of the water between June 1, 1972 through May 31, 1993. This application must be filed before March 1, 1994. The Board will grant an initial regular permit to those existing users who (1) file the declaration and pay the required fee, and (2) show by convincing evidence that they made "beneficial use" of underground water from the Aquifer. "Beneficial use" is defined as use of an amount of water that is economically necessary for a lawful purpose.

The Authority will allow withdrawal equal to the maximum amount of water beneficially used during any one calendar year of the historical period. If the total amount of water available for all permits exceeds the amount available for permitting, the Authority will adjust the amount proportionately. In any event, an existing irrigation user shall receive a permit not less than two acre-feet a year for each acre of land irrigated in any one calendar year during the historical period. These permits remain in effect until abandoned, cancelled or retired.

a. Interim Authorization

Those persons that have beneficially used water from a well prior to June 1, 1993 may continue to withdraw and beneficially use the water if the well is in compliance with all laws and the person has filed a permit application with the Authority by March 1, 1994. The amount withdrawn, however, cannot exceed the maximum amount listed in the beneficial use application for any one year of the historical period. In addition, use under this interim authorization is subject to the comprehensive management plan and other rules adopted by the Authority. Interim authorization ends when the Authority acts on the application for the well, or on March 1, 1994 if the owner has not filed a declaration of historical use.

b. Additional Regular Permits

After the Authority has issued all regular permits, it may issue additional regular permits subject to the total limits. However, the Authority cannot take any action on an application for additional regular permits until all determinations have been made regarding initial regular permit applications submitted before March 1, 1994.

2. Term Permits

The Authority has the power to issue interruptible term permits for any number of years, not to exceed ten years. These term permit holders cannot withdraw water from the San Antonio pool unless the level is higher than 665 feet above sea level, or withdraw from the Uvalde pool unless the level is higher than 865 feet above sea level.

3. Emergency Permits

The Authority may issue emergency permits only to prevent the loss of life or to prevent severe, imminent threats to the public health or safety. These permits may not exceed thirty days and may be renewed by the Board. An emergency permit holder can withdraw water without regard to the effect on other permit holders.

C. REUSE CREDITS

All regulations of withdrawal from the Aquifer must provide for a credit for certified reuse of Aquifer water. To receive this credit, the Authority or a local underground water conservation district must certify the lawful use and reuse of the water, the amount of water to be used, and the amount of withdrawals to be replaced by reuse.

D. Permit Retirement Plan

The Authority must prepare and implement a plan for reducing, by January 1, 2008, the maximum annual authorized withdrawal under regular permits to 400,000 acre feet per year. This plan must take into account water conservation and reuse measures, measures to retire water rights, and other water management measures designed to achieve the reduction levels. If the Authority does not meet this goal by January 1, 2008, the maximum amount of withdrawal of each regular permit shall be immediately reduced by an equal percentage in order to achieve 400,000 acre feet per year requirement.

E. Acquisition of Rights

The Authority is given power to acquire permitted water rights of the Aquifer, and permits or rights to appropriate surface water or groundwater from any source. It may fund these acquisitions by the water supply account of the Texas Water Development Fund, the Water Loan Assistance Fund, or the Revenue Bond Program as established by the Water Code.

F. Conservation and Reuse Plans

The Authority can require regular and term permit holders to submit water conservation plans and reuse plans for review and approval, and the Board shall require permit holders to implement the plan within a reasonable time after its approval. The Board is required to assist in developing these plans. The Authority must also prepare and update enforceable and effective conservation and reuse plans biennially, and submit these plans to the legislature no later than January 1 of each odd-numbered year.

FUTURE WATER MANAGEMENT PLANS AND PROGRAMS

A. Comprehensive Management Plan

The Authority is required, by September 1, 1995, to implement a comprehensive water management plan that includes conservation, future supply, and demand management plans. The Authority must also develop a twenty-year plan for providing alternative supplies of water with the assistance of the Committee, the Texas Water Development Board, and other underground water conservation districts within the Authority's boundaries. The plan must have five-year goals and objectives to be implemented by the Authority and reviewed annually by the appropriate state agencies and the Edwards Aquifer Legislative Oversight Committee.

B. Critical Period Management Plan

The Authority is also required to prepare and implement a plan for critical period management before September 1, 1995. This plan must distinguish between discretionary use and non-discretionary use, require reductions of all discretionary use to the maximum extent possible, require utility and pricing to limit discretionary use by utility customers, and require reduction of non-discretionary use by permit or contractual users. This plan must balance the importance of water use and needs of competing interests and users.

C. Research

The legislation requires the Authority to complete research on the technological feasibility of spring flow yield enhancement being conducted by the Edwards Underground Water District by September 1, 1993. The Authority is also given the power to conduct research regarding augmentation of spring flow, recharge, water quality, management of available water resources including water conservation, and alternative supplies of water. It may contract with other persons to conduct this research.

FUNDING OF THE AUTHORITY

A. Tax; Bonds

The Authority cannot levy a property tax. It can, however, issue revenue bonds to finance purchases of land for development of water projects. The bonds issued by the Authority are subject to approval by the Attorney General, and the Authority is authorized to invest the proceeds of the bond as it determines is appropriate.

B. Fees

The Authority will be financed through user fees, imposing the cost burden of management on the Aquifer's users. The permit holders and users of the Aquifer are responsible for reducing withdrawals to meet the initial authorized withdrawal limit of 450,000 acre feet per year. The Authority will assess management fees based on water use in order to finance its administrative expenses and programs. The water districts within the Authority's boundaries have the option to contract with the Authority to pay expenses through taxes in lieu of user fees equal to the amount they would have paid through user fees.

The Authority is also required to assess an equitable special fee based upon permitted water rights to be used to finance the retirement of permitted rights by 50,000 acre feet by 2008. These special fees must be set at a level sufficient to match the funds raised from the assessment of equitable special fees on downstream water right holders. The Commission is authorized to assess special fees on downstream water right holders in the Guadalupe River Basin to be paid to the Authority for the retirement of Aquifer rights. These cannot exceed one-half of the cost of permit retirements from 450,000 acre-feet a year by December 31, 2007, to 400,000 acre-feet a year by January 1, 2008. The amount of fees assessed must be determined in accordance with the rules adopted by the Commission for fees under the South Texas Water Master Program in order to ensure that fees are equitable.

The Authority can set different fee rates on a per acre-foot basis for different types of use. The fees shall be assessed on the amount of water a permit holder is authorized to withdraw except for irrigation users. The fee rate for agriculture use shall be based on the volume of water withdrawn and cannot be more than 20% of the fee rate for municipal use. The permit application fee will not exceed $25.00, and the registration application fee will not exceed $10.00.

RIVER DIVERSIONS

The Commission is given power to issue special permits to divert water from the Guadalupe River at a diversion point where the river emerges as a spring. These special permits will be conditioned on a limitation of withdrawals under the regular permit to withdraw water from the Aquifer. The permit holder may divert water only if it is done in lieu of withdrawal from the Aquifer, and the diversion does not impair senior water rights or vested riparian rights. These permits are subordinate to permitted water rights for which applications were submitted before May 31, 1993, and vested riparian rights.

WELL MONITORING

A. Measuring Devices

Non-exempt users that withdraw water from the Aquifer must install and maintain a measuring device approved by the Authority and that will indicate the flow rate and cumulative amount of water withdrawn. However, upon written request to use an alternative method, the Authority may waive this

requirement. The Authority shall bear the cost of purchasing, installing and maintaining these devices for irrigation wells in existence by September 1, 1993.

B. Reports

Permit holders are required to file with the Authority a written report of their water use in the previous year by March 1st.

C. Well Permitting/Metering Exemption

Wells that produce 25,000 gallons of water a day or less for domestic or livestock use are exempt from the permitting and metering requirements discussed above. These wells must be registered with the Authority or with the local water district within which it is located. Wells that are within or are serving a subdivision requiring platting do not meet this exempt qualification.

Transfer of Rights

All water withdrawn from the Aquifer must be used within the boundaries of the Authority. The Authority can establish procedures by which persons who install water conservation equipment can sell the water conserved. Permit holders may lease their water rights, but permit holders for irrigation use cannot lease more than 50% of those rights. The remaining rights must be used in accordance with the original permit and must pass with the transfer of the irrigated land.

VIOLATIONS OF AUTHORITY RULES AND ORDERS

A. Prohibitions

No one may withdraw water from the Aquifer unless the use is exempt or authorized by a permit. Permit holders cannot violate the terms or conditions of the permit, waste water withdrawn, pollute or contribute to pollution, or violate this article or any rule of the Authority.

B. Enforcement

The Authority is given the power to enter orders to enforce the terms and conditions of permits or rules, and shall provide for the suspension of a permit for failure to pay a required fee or for violations of the conditions, orders or rules adopted by the Authority.

C. Administrative Penalty

The Authority can issue penalties against violators between $100.00 and $1,000.00 for each violation and for each day of the continuing violation. In determining the amount, it must consider the history of previous violations, amount of the fine, correction efforts, enforcement cost, and any other matters justice may require. The Authority may issue preliminary reports regarding violations, and if it does so it must give written notice of the report to the violators. The notice must include a brief summary of the facts, the amount of the recommended penalty, and the person's right to informal review. The person then has ten days to either consent to the report or make a request for an informal review.

If the violator consents, the Authority shall assess the penalty, give notice of its action to the violator, and the person must pay the fine within thirty days. If the person requests an informal review, the Authority must conduct the review and give the violator written notice of the result. After this notice, the violator has ten days to request a hearing. Where no hearing is requested, the Authority shall assess the penalty and give the written notice of its action. The violator then has thirty days to pay the fine.

In any event, the Authority's order is final thirty days after it is issued, and the person must (1) pay the amount of the penalty; (2) pay the penalty and file a petition for judicial review; or (3) without paying the penalty file the petition for judicial review. There is also a procedure for staying enforcement of the penalty by putting up a bond or amount equal to the penalty within the thirty day period.

If a person is financially unable to pay this amount, they may request the court to stay enforcement of the penalty by filing an affidavit stating that they are unable to pay or put up a bond, and send a copy of the affidavit to the Authority. Where the Authority receives such an affidavit, the Authority can file a contest to the affidavit with the court within five days. The court then must have a hearing on the facts alleged in the affidavit and shall stay the enforcement of the penalty if it finds the alleged facts are true. The person filing the affidavit has the burden of proof. Where this review process is not met and a penalty is not paid, the matter may be referred to the Attorney General for collection.

Judicial review of an order of the Authority is under the Administrative Procedure and Texas Register Act and the Substantial Evidence Rule. The court has the power to uphold

the penalty and order the person to pay that amount, or reduce the penalty and remit any paid amount or bond, plus interest.

D. Injunction by Authority

The Authority has the power to file a civil suit in a state district court for an injunction to enforce this article. If so, the Authority may recover reasonable attorneys fees in that suit.

E. Suit for Mandamus

The Commission may file a civil suit for an order of mandamus against the Authority in order to compel it to do its duties.

F. Civil Penalties

The Commission or Authority has the power to file suit for civil penalties between $100.00 and $10,000.00 for violations and for each day of violation, and for attorneys fees. These penalties and attorneys fees shall be paid to the Authority and deposited to the credit of the general revenue fund.

OTHER IMPORTANT PROVISIONS

A. Repealer; Transfers; Rules

The legislation abolishes the Edwards Underground Water District (EUWD), and all files and records of the district are transferred to the Authority. All real and personal property, rights, leases, funds, contracts, staff, and obligations are likewise transferred to the Authority. Any rule adopted by the EUWD before September 1, 1993 that relates to management or control of the Aquifer becomes a rule of the Authority.

B. Effect on Other Districts

Other water districts within the Authority's area may manage and control water that is a part of the Aquifer to the extent that the activities do not conflict with this article or the rules and orders of the Authority. In addition, the Board can delegate powers and duties and shall do so if another district so requests and the district demonstrates that it has the statutory power, the necessary rules and policies, and an implemented system designed to provide the Authority with adequate information for monitoring purposes. The Board can deny such a request if it previously has

terminated delegation. It can terminate delegations when it determines that the other district has failed to enforce or implement any rules or orders delegated. The Authority must give notice of this termination with reasons for its termination. Not later than the tenth day after this notice, the district must demonstrate its commitment and ability to implement its delegated authority. The Authority, within this ten day period, must make its decision whether to reserve full responsibility or continue to delegate responsibility to the district. Notice of any termination must be given to the district.

C. Creation of Underground Water Conservation Districts

Other underground water conservation districts can be created in any county affected by this article.

D. Cooperative Contracts for Artificial Recharge

The Authority may contract with other political subdivisions to provide for artificial recharge through injection of wells or with surface water, and for the subsequent retrieval of the water by the political subdivision. The Authority cannot deny a request to enter into such a cooperative contract if the political subdivision agrees to file with the Authority records of injection or artificial recharge, and provide for the protection of the quality of aquifer water. The political subdivision causing this artificial recharge is entitled to withdraw during any twelve month period the measured amount of water actually artificially recharged during the preceding twelve month period less amounts determined to be appropriate by the Authority. The amounts withdrawn are not subject to the total permitted withdrawals as provided above.

E. Recharge Dams

The Authority can build or operate recharge dams for the purpose of increasing the yield of the Aquifer and for recharge purposes only if it does not impair senior water rights or vested riparian rights. The Commission is also required to determine the historic yield of the flood water to the Nueces River Basin, which is equal to either the average annual yield between 1950 to 1987, or the annual yield for 1987.

72-118 O - 93 - 8

F. Uvalde County Underground Water Conservation District

The legislation validates the Uvalde County Underground Water Conservation District, with all the powers, privileges, rights and duties provided by Charter 52 of the Water Code and the general laws applicable to underground water conservation districts.

G. Legislative Oversight

The legislation creates the Edwards Aquifer Legislative Oversight Committee, which shall be composed of three members of the Senate appointed by the Lt. Governor and three members of the House appointed by the Speaker. This Committee shall examine and report to the legislature on the effectiveness of the Edwards Aquifer Authority in meeting the goals of the legislature. The Board shall continually oversee the activities of the Authority; the activities of the Committee; compliance with federal laws relating to endangered species in the Edwards Aquifer region; water pollution; control activities; and the activities of soil and water conservation districts and river authorities in the Edwards Aquifer district that affect the management of the Aquifer.

H. Sunset of the Guadalupe-Blanco River Authority

The Texas Natural Resource Conservation Commission shall notify the Edwards Aquifer Authority of any water available for appropriation in the Guadalupe-Blanco River Basin. The Board of directors of the Guadalupe-Blanco River Authority is subject to review under the Texas Sunset Act, but is not abolished under that Act. After the review, unless the legislature continues the members of the Board of directors in office, the Board members' terms expire September 1, 1995. If the terms expire, a new Board of directors shall be appointed: three appointed to terms expiring February 1, 1997; three appointed to terms expiring February 1, 1999; and three appointed to terms expiring February 1, 2001.

Russell S. Johnson
Davidson & Troilo

Broken Law: The Endangered Species Act

Most people believe that caring for the environment and preserving native species of wildlife is important. The Endangered Species Act , ratified in 1973, was intended to prevent the wanton killing off of a species such as the grizzly bear and the bald eagle. Neither Congress nor president Nixon seems to have had a clue what they were setting in motion when they passed the Endangered Species Act. In fact, the original spirit of the act was not anti-ranching, anti-hunting, or anti-American. The preservation of nature and wildlife is a worthwhile cause imperative to our future. However, the way the Endangered Species Act is presently being carried out ignores both endangered species and the people involved in favor of bureaucratic special interest groups. The Endangered Species Act has become an effective tool in the hands of the preservationists and those intent on destroying the livelihoods of millions of Americans. Environmentalists are using the Endangered Species Act to take unfair advantage of the average, honest, hardworking American. They put plants and animals on a pedestal, and suspend the landowner's rights. The Endangered Species Act is being used in a morally wrong way, and it needs to stop.

First of all, the Endangered Species Act has been used to freeze large acres of land from commodity use. In the Pacific Northwest, the Northern Spotted Owl caused thousands of people to lose their jobs and go hungry because they could not continue their timber operations. Environmentalists said that timbering would eventually cause the owl to lose its habitat, even though statistics have shown that the amount of wood growing in American forests is increasing by more than two billion cubic feet annually, and the annual growth of timber is 19% more than the amount harvested annually. Not only that, but the California Spotted Owl, which is not even close to being endangered, is genetically the same owl as the northern spotted owl.

The Endangered Species Act cuts off a person's right to defend their private property. If a person kills an endangered wolf, for sport, sure he or she should be punished - but what if that same wolf is attacking his livestock, his dog, or his family? Try a $100,000 dollar fine and mandatory prison sentence. No Exceptions.

Another problem with the Endangered Species Act is that people are using it to stop activities that they do not like. It is not right that a few of the naive can stop someone from ranching and grazing cattle because they do not eat meat, or think cows pollute the environment with methane. Should someone that lives in Washington D.C. be allowed to stop a rancher living in the Hill Country from running livestock on their land where their great grandfather began ranching in 1911? It is not right that the Endangered Species Act has been used to stop research projects such as a $240 million dollar telescope for the University of Arizona. Environmentalists claimed that endangered red squirrels lived near, and if the telescope was built, the little squirrels would pay too much attention to people, forget to collect nuts, and fall prey to predators. Well what about hunting? Should animal rights activists be allowed to prevent hunting? They have already done it. The Columbia white tailed deer has been restricted from hunting since environmentalists got it listed as endangered ten years ago. Recent studies have shown that the Colombia white tailed deer is genetically a plain jane white tailed deer.

All of this points to the final and most serious problem with the Endangered Species Act. The act is being used and manipulated as a Federal land acquisition tool. The United States Constitution states in the fifth amendment that "No person shall be... deprived of life, liberty, or property, without due process of law; Nor shall private property be taken

for public use, without just compensation." That is the main controversy. "Without just compensation." My family owns a ranch in Northwest Travis county, and it has been in my family for over eighty years. Then the Golden-cheeked Warbler was discovered to supposedly make its habitat around my ranch. The mere discovery of an endangered species devalued the land and the land miles around it by potentially limiting the activities in which the landowner could engage. Along comes a 'conservation' organization and offers to buy the landowner out of his misery at the now deflated value. Does the government call that "just compensation?" The term "endangered species" should be changed to mean "limiting activities and devaluing land so it can end up in government hands from unwilling sellers." The Federal Government wants to spend over $200 million to protect the same bird that additional government dollars kills in crop insecticide programs in Guatemala. The same Government that used to pay landowners to slash and burn cedar trees for erosion control now threatens to throw them in jail for doing so because the aforementioned bird uses the bark of cedar trees to build its nest. The Endangered Species Act is being misused by the misguided few in ways that have little or nothing to do with saving anything.

The one thing that Federal, State, and Local environmental organizations do not realize is that the farmer and rancher were the first environmentalists. They know and love the land more than anyone else, because they live on it and work with it every day, and have been for thousands of years. Private owners are the best stewards of the land and its resources. Many alternative plans of land acquisition have been proposed to the government. Most of them are people driven plans (instead of Federal) that encourage each landowner to voluntarily take a personal interest in habitat protection. This kind of plan was brought before the board of the Balcones Canyonlands National Wildlife Refuge proposal, and embraced with enthusiastic arms by landowners. The Federal board, however, ignored the plan and continued to use the land acquisition method. These actions can only further prove the allegations that the Government is using the Endangered Species Act to obtain more land.

An endangered species would have no better allies than the landowner. An endangered creature chose my family's land to live on, a Golden-cheeked warbler, and I want to fight for the little bird with everything I have. I want it to prosper! But how can the poor little animal expect me to love and protect it if it forces my family to sell our beloved land at highway robbery prices, and then pay higher and higher taxes to pay for what once was our land? What about a family that cannot prevent their Historical home from slowly falling down an eroding creek bed because an endangered beetle lives in the ground under the house? The Endangered Species Act pits landowners against animals, purposely making the landowners look like an enemy in the public eye. This is getting ridiculous! Finally, people are beginning to really speak out against the Endangered Species Act. It's time to make people more important than animals.

There are plenty of other changes that must be made in the Endangered Species Act before it can be called democratic and constitutional. First, population counts of endangered animals need to be extended to the entire continent, not just the borders of the United States. For example, the gray wolf population of the United States is under 5,000, but the population of gray wolves on the continent of North America is between 40,000 and 50,000. The gray wolf is listed as an endangered species because the population in Canada and Alaska does not count. The public is constantly led to believe that a species is endangered when really it is not. The endangered Grizzly Bear has a population of more than 40,000 in North America. Socio-economic impacts must also be considered. Land values in Texas dropped $300 million when the Golden-cheeked Warbler was listed as an endangered species. Next, the government needs to follow the constitution and compensate land acquisitions with the true value of the

land, not the deflated value after a species is listed. Another constitutional right must also be upheld. A person should be able to protect their property and family from animals, even if they are endangered. Another change should be the amount of money spent on preserving a species. After all, it is the taxpayers footing the bill. Whooping crane recovery programs cost about 1,000,000 dollars for each bird, and the condor recovery program finally released two birds after thirty years and $25 million (now the environmentalists tell us that the condors might not be able to survive in the wild at all). Finally, the Endangered Species Act needs to work "Of the people, by the people, and for the people."

The preservation of all species is imperative for the prosperity of future generations, and life on earth in general. If given the chance, Americans will do all they can to help out. The Endangered Species Act, however, does not give the opportunity to help, it forces people to sacrifice, and that is not the American way, or in the spirit of our Nation. People from urban areas need to realize that environmental votes are not what they seem to be on the surface, and they hurt other people by limiting basic rights and clogging the economy of the entire nation. If the Endangered Species Act gets the extension without any changes, then the dark clouds of freedom and constitutional restriction in the soiled name of environmental protection will gather on the horizon and continue to build until a torrent is unleashed that only leaves destruction in its wake.

Nicole Kiefer
10402 Loring Dr.
Austin Texas 78750

Past FFA Center Dist. Secretary
Will be attending Tarleton State Un.
in the fall - Pre Vet

The Honorable Greg Laughlin
Congressman, 14th District of Texas
Chairman, Subcommittee on Natural Resources and the Environment of the
Merchant Marine and Fisheries Committee
House of Representatives
Washington, D.C. 20515-4314

July 6, 1993, HEARING ON REAUTHORIZATION OF THE ENDANGERED SPECIES ACT,
San Marcos, Texas

My name is Vince Taylor, and I reside in Hays County, Texas. My office address is P. O. Box 100, Dripping Springs, Texas 78620, (512) 894-0187. I am a semi-retired lawyer, author, and rancher, born September 11, 1915, near Flatonia, Texas. My education includes: graduate of The University of Texas at Austin and its School of Law, plus post graduate studies. I served my country in World War II and retired as a USAF lieutenant colonel. I have been a city attorney, assistant attorney general of Texas for 22 years, a law professor, a U.S. bankruptcy trustee, and in private law practice.

My family farmed and ranched in Fayette-Gonzales counties, and I own the old homestead, plus a ranch on the headwaters of Barton Creek in Hays County. We have practiced soil erosion prevention, conservation of natural resources, and protected wild life on all my lands. As the assistant attorney general responsible for the early environmental state law enforcement, I handled major cases for Texas against water and air pollution successfully. I wrote the Texas Environment Law Casebook we used in St. Mary's Law School for many years. I also wrote the Texas Water Law Casebook used in the same law school. I am no newcomer to protection of our environmnet and earth's creatures.

In the last ten years I have found that federal, state, and local regulations dealing with the environment and so-called Endangered Species alarming.

For example:

1. If I plan to rebuild a very old fence on my ranch, I can be stopped, prosecuted, and fined because some curiour trespasser complained that my cutting brush along the fenceline is disturbing some foreign bird.

2. Removal of undesirable brush to permit better grazing for my livestock and wildlife calls for a permit that may not be issued because my land is supposed to provide possible nesting for some odd creature.

3. My plans to erect water storage tanks along eroding gullies to prevent soil from washing to the Gulf, provide stock and wildlife drinking water, and fishing, can easily be stopped by some stranger without any hearing provided me.

These are only a few examples of my property being taken without due process and without compensation as quaranteed in our Bill of Rights, national and state. The same applys to numerous others in similar situations.

I am finding that landowners, and especially land respecting ranchers with a history of conservation and wildlife protection, are suffering from over-bearing persuasions by tree and stranqe wildlife worshippers, to the detriment of individual rights and to our general welfare.

In my opinion the vocal advocates of endangered species preservation should assume the responsibility for harm caused by taking property without just compensation. God created species, allows disposal and demise of some, and then recreates new varieties. Men and women do not create them nor renew them.

It is time to halt the reauthorization of the Endangered Species Act. Congress should route those funds to reduction of our National Defecit.

Because on this date I am chairing the Appraisal Review Board of the Hays CAD, listening to protests by overburdened tax paying property owners, I am unable to attend your scheduled meeting at Southwest Texas State University, and therefore ask that my brief remarks be read to your committee.

Vince Taylor

VINCE TAYLOR

LAW OFFICES OF
H. KYLE SEALE
COLONNADE OFFICE TOWER, SUITE 630
9901 I H. 10 WEST
SAN ANTONIO, TEXAS 78230
(512) 699-1000

July 2, 1993

Attention: Leslie Gray
Subcommittee on Environment & Natural Resources
Room 545- Ford House Office Building
Washington, D. C. 20515

In Re: Re-authorization of Endangered Species Act

Gentlemen:

We are against the re-authorization of the Endangered Species Act because of the untold hardship visited upon human beings across our nation in the misguided attempt to perpetuate species which would not survive without massive effort on the part of humans.

Here in Central Texas, the development of vast areas is being severely curtailed because of the presence of birds, fish, and plants; and now the City of San Antonio will be forced by federal edict to develop surface water supplies costing hundreds of millions of dollars to protect a few small fish that would have become extinct in the 1950's had they not been preserved in an aquarium by a Southwest Texas State University professor.

We understand that 90% of all the plants and animals that have ever lived on earth are now extinct; and a misguided effort to preserve in the short run species that will probably not be in existence for long, no matter what efforts we employ, at the expense of the progress of our nation, and humanity, defies all reason, logic and common sense.

Thank you.

Yours very truly,

H. Kyle Seale

Daniel K. Seale

Stephen M. Seale

HKS/DKS/SMS/jm

FULBRIGHT & JAWORSKI
600 CONGRESS AVENUE, SUITE 2400
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WRITER'S DIRECT DIAL NUMBER
512/320-4886

March 5, 1992

VIA HAND DELIVERY AND
CERTIFIED MAIL

Mr. Sam Hamilton
U.S. Fish & Wildlife Service
Ecological Service Field Office
Grant Building, 4th Floor
611 E. 6th Street
Austin, TX 78701

ATTN: Ms. Jana Groady

Re: Petition To List Barton Springs Salamander (*Eurycea* Sp.) As An Endangered Species--Comments Regarding the Sufficiency of the Petition

Dear Mr. Hamilton:

As mentioned in my February 21, 1992 letter regarding the above-referenced Petition to list the Barton Springs Salamander under the Endangered Species Act ("ESA"), as a person interested in the Petition I plan to present comments pursuant to 50 C.F.R. § 424.13 on several aspects thereof.

By this letter I am offering my initial set of comments regarding the sufficiency of the Petition under 50 C.F.R. § 424.14. Because I believe that the Petition does not adequately supply the information required under that regulation, I plan later--I hope within several weeks--to provide additional comments regarding the information which I believe would need to be gathered and studied before the United States Fish & Wildlife Service ("Service") could reasonably be requested to address the criteria specified in 50 C.F.R. §§ 424.11 and 424.12 with respect to the Barton Creek Salamander. Because the Petition supplies no such information, it should be rejected as not conforming to the regulatory requirements in the first place and thus as not supporting a finding that the petitioned action may be warranted.

General Comments

The Service has included the Barton Springs Salamander among the animal taxa being considered for possible addition to the List of Endangered and Threatened Wildlife. 54 Fed. Reg. 554, 558 (Jan. 6, 1989). The Barton Springs Salamander was designated as one which has "not yet been formally described in the scientific literature." *Id.* at 555. It was also designated as Category 2, meaning that "information now in possession of the Service indicates that proposing to list as endangered or threatened is possibly appropriate, but ... conclusive data on biological vulnerability and threat are not currently available to support proposed rules." *Id.*. at 544. The Service noted that "[f]urther biological research and field study may be needed to ascertain the status [of the Barton Springs Salamander]." *Id.* The Petition purports to supply the necessary information.

In general, however, the Petition includes *absolutely no new biological information* specific to the Barton Creek Salamander generated since the Service's 1989 *Federal Register* publication, and even omits references to several important scientific studies regarding *Eurycea*. The Petition does not even attempt to point to any "further biological research and field study" relative to the species. Rather, the Petition is restricted exclusively to providing information regarding recent human development activities in an area described as the Barton Springs Aquifer and which the petitioners apparently find objectionable. Based on that description of development activities, the Petition draws on general studies of amphibian species and gross *assumptions* about the biology and physiology of the Barton Springs Salamander to reach broad conclusions as to the threats to its survival. Clearly, the Petition cannot reasonably be construed as satisfying the Service's informational needs inherent in a Category 2 designation.

Indeed, in a February 11, 1992 memorandum to the BCCP Executive Committee (copy attached) a BCCP Biological Advisory Team ("BAT") member stated as follows with respect to the *Eurycea* salamanders in general:

1. Very little is known about the relationship of these animals to their environment and other animals in their environment (E.G., what do they eat? What eats them?)

2. Very little is known about their populations regulating factors (E.g., Population size, natality, mortality and longevity.)

3. More information is needed regarding the distribution of these species, particularly their ranges within the aquifers in which they live.

4. More information is needed regarding the effects of various pollutants on the salamanders, including effects on growth, survival and reproduction.

5. More information is needed on the effects of pollutants on aquifer ecosystems in general.

That describes precisely the kind of information required by section 424.14 and which is entirely missing from the Petition. The BAT was aware of the Petition, see BCCP Final Draft at p. 6-21, yet still reached the above-referenced conclusions. Presumably, the BAT would have gathered the best available scientific data on the *Eurycea* to ensure that the BCCP adequately covers Category 2 species. The BAT appears to have concluded, however, that "more information is needed," just as the Service concluded in 1989 when it designated the Barton Springs Salamander a Category 2 species. The Petition therefore should be rejected as not providing any meaningful information on which to reassess the Barton Springs Salamander's Category 2 status.

Specific Comments Under Section 424.14

More specifically, the Petition fails in every respect to satisfy the information requirements of 50 C.F.R. § 424.14(b)(2). That provision requires as follows:

> (2) In making a finding under paragraph (b)(1) of this section, the Secretary shall consider whether such petition
>
> (i) Clearly indicates the administrative measure recommended and gives the scientific and any common name of the species involved;
>
> (ii) Contains detailed narrative justification for the recommended measure, describing, based on available information, past and present numbers and distribution of the species involved and any threats faced by the species;
>
> (iii) Provides information regarding the status of the species over all or a significant portion of its range; and
>
> (iv) Is accompanied by appropriate supporting documentation in the form of bibliographic references, reprints of pertinent publications, copies of reports or letters from authorities, and maps.
>
> The petitioner may provide information that describes any recommended critical habitat as to boundaries and physical features, and indicates any

benefits and/or adverse effects on the species that would result from such designation. Such information, however, will not be a basis for the determination of the substantiality of a petition.

Each of these requirements is addressed below.

1. Information Regarding Species Name and Administrative Measures.

One of the important issues with respect to the Barton Creek Salamander is whether it is a distinct species. The Service's designation of the Barton Creek Salamander as *Eurycea* Sp. indicates that current scientific literature may not provide the taxonomic and morphologic information sufficient to justify a species designation distinct from other *Eurycea*. The Petition provides no new information whatsoever in this regard, relying entirely on the work of one researcher, all of which predates the Service's 1989 Category 2 designation. *See* Petition at p. 2. The Petition refers to ongoing research on this topic, *id.*, thus appearing to acknowledge that distinct species status for the Barton Springs Salamander has not yet been scientifically established and generally agreed upon by the scientific community. I also am aware of several extensive taxonomic studies of *Eurycea* which the Petition does not mention (my later filed comments will discuss those studies). Hence, the Petition does not satisfy the requirement of providing information regarding the scientific name as required in Section 424.14(b)(2)(i).

2. Information Regarding Numbers, Distribution, and Threats.

Even assuming the Barton Springs Salamander is a distinct species, the Petition fails dramatically in this category of information. First, the Petition simply states that the "size of the [Barton Springs Salamander] population cannot be estimated." Because the Petition also contends that "its exact geographic range cannot be directly observed," the Petition lacks any data whatsoever on the "past and present numbers and distribution of the species" as required in section 424.14(b)(2)(ii).

The Petition offers no justification for its complete abdication in this regard. For example, specimens of the Barton Springs Salamander have been collected from the Barton Springs at Zilker Park in Austin. *See* BCCP Final Draft at 6-20. The Petition, however, offers no data regarding past and present numbers of specimens observed. Presumably such data exist or, if they do not, could be obtained through further field study. Also, the Petition does not explain why it would not be possible to conduct biological research and field studies regarding the population and range, if that is even true. If through some form of field study and research population and range could be extrapolated or otherwise estimated, the Petition should explain so and offer justification for its not doing so.

Indeed, without presenting information on past and present population numbers and range, it is difficult to understand how the Petition reaches the conclusion that the Barton Springs Salamander is endangered. Endangerment requires a finding that the species "is in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6). Without even so much as an estimate of population, or data regarding historical numbers of observed specimens at the Barton Springs, the Petition cannot justify that finding. Indeed, some of the allegations of the Petition regarding threats to the species are plainly mistaken. For example, the Petition claims that "water leaving the [Barton Creek Mall] control structure after treatment carries an average of 7,810 pounds of lead during each storm event," Petition p. 11-12, which is an absurd allegation. Clearly, the Petition provides no meaningful information in response to section 424.14(b)(2)(ii).

3. Information Regarding Status Throughout Range.

As previously stated, the Petition contends that the geographic range of the Barton Springs Salamander, assuming it is a distinct species, cannot be directly observed. However, based on the size of the Barton Springs Aquifer, the Petition asserts that "[t]he range can be no larger than the 155 square mile segment of the aquifer that feeds Barton Springs ... and may actually be restricted to an area much less than 1 square mile in the immediate vicinity of the springs." Petition at 5. From there the Petition takes two widely divergent paths.

On the one hand, to support its conclusions regarding endangerment, the Petition acts as if the range is "extremely limited," Petition at 18, suggesting a small range area. By contrast, the Petition requests a critical habitat designation covering the full 155 square mile area encompassing the Barton Springs Aquifer, recharge zone, and contributing zone. Absolutely no scientific justification is provided for describing the range as any where at or between the described 1-square mile and 155-square mile range area end points.

The Petition also provides no information regarding the status of *the species*, expending all of its efforts instead on a long description of human development activities over the Barton Springs Aquifer which the petitioners appear to find objectionable. The Petition *assumes* that this development threatens the Barton Springs Salamander, but offers no biological proof of that condition. For example, have specimens obtained at the Barton Springs over the years exhibited any physiological trends which would suggest such a threat exists? If such data exist, the Petition should discuss *all* of them; if no such data exist, then clearly further biological research and field study is needed. Because the Petition presents no such data, the Petition fails to provide meaningful information regarding the status of the species in its range as required by section 424.14(b)(2)(iii).

Mr. Sam Hamilton
March 5, 1992
Page 6

4. Supporting Documentation.

Although the Petition contains bibliographic references, which as my later-filed comments will demonstrate are incomplete, and several rudimentary maps, there are no "reprints of pertinent publications [and] copies of reports or letters from authorities" as required by section 424.14(b)(2)(iv). Yet the Petition acknowledges that the Barton Springs Salamander is a Category 2 species for which new information which might be contained in such reports and authorities could shed light on the Petition's merits. Hence, the Petition's failure to attach such reports and authorities can only be taken to mean that none exist, or that none exist which support the Petition. Clearly, in the absence of new, credible research of this sort, it is not appropriate to ask the Service at this time to reevaluate the Barton Springs Salamander's status.

5. Critical Habitat.

Perhaps the most perplexing aspect of the Petition is its request to define the critical habitat of the Barton Creek Salamander as the *entire* Barton Springs Aquifer, recharge zone, and contributing zone. *See* Petition at 16. As the Petition recognizes, if the Barton Springs Salamander is a distinct species, the maximum geographical area which it can occupy can be no greater than the 155 square mile segment of the aquifer that feeds Barton Springs. *See* Petition at 5. Hence, the Petition requests a critical habitat designation *as large as the maximum possible range of the species*.

As you know, the ESA defines critical habitat as the areas "essential to the conservation of the species" and requires that except in specified circumstances it "shall not include the entire geographical area which can be occupied." 16 U.S.C. § 1532(5). Yet, on the basis of absolutely no new data, no new biological research, and no new field study, the Petition purports to conclude that there is a scientific basis not only for designating critical habitat, but also for designating an area as large as the alleged species' maximum possible range and thus larger than that normally allowed by law.

Conclusion

The Petition asks the Service essentially to shortcut the further biological research and field study which the Service requested in 1989 when it designated the Barton Springs Salamander as a Category 2 species. The Petition is not based on any new scientifically generated and accepted information, at least none which is presented. As such, the Petition does nothing meaningful to further the body of information available with respect to the Barton Springs Salamander. Accordingly, the Petition should be denied as not meeting the legal requirements of 50 C.F.R. 424.14(b)(2) and therefore not supporting a finding that the petitioned action may be warranted.

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Because I believe the status of the Barton Springs Salamander is a matter of great importance, I plan soon to provide additional comments regarding the type of further biologic research and field study which should be conducted before the Service would reasonably be in a position to reexamine the status of the Barton Springs Salamander under the criteria of 50 C.F.R. § 424.11 and 424.12. Without careful analysis of this additional body of biological research and field study, any decision to downgrade or upgrade the status of the Barton Springs Salamander would be premature.

Sincerely,

J. B. Ruhl

JBR/skj

cc: Mr. Michael Spear
Regional Director
U.S. Fish & Wildlife Service
P.O. Box 1306
Albuquerque, NM 87103-1306

June 17, 1993

Merchant Marine and Fisheries Subcommittee
On the Environment and Natural Resources
FAX 202-226-3540
Attention: Jane Ann Rex / Congressman Jack Fields et. al.

Re: Balcones Canyonlands Conservation Plan (BCCP)

Dear Committee Members:

I oppose the Plan referenced above and any other similar plan that is deemed necessary for preservation of endangered species. It is my belief that the enforcement capability of the federal bureaucracy has been exaggerated in an effort to achieve local funding for endangered species protection. It is my opinion that the BCCP should be termed a recovery plan for the feathered species of local concern, the vireo and warbler. The so-called Balcones Canyonlands Conservation Plan (BCCP) far exceeds any reasonable measures that might be considered necessary for a local "conservation plan" and, in fact, constitutes a "recovery plan" by requiring the creation of a viable population of these species where none now exists. That is, if you believe the incomplete biological work upon which the endangered listing was made. Which is, in my mind, a BIG IF. Biological research regarding these species has been very limited due to the shortage of funds at all levels of government. Area biologists have acknowledged that the satellite imaging work that was used to "list" these bird species is considered to be a very unreliable method for identifying occupied habitat and should not have been considered as sufficient evidence for the listing process. By federal law, recovery plans for at-risk species should be funded by the mandating agency after providing complete biological studies to demonstrate the necessity for said funding. Since this has not been provided it is my opinion that the local conservation planning effort is premature.

I believe that the driving force behind the plan is the Texas Nature Conservancy. This so-called non-profit group stands to benefit through their land flipping deals and will increase their revenues by millions of dollars. Their profit will be made at the expense of local and federal taxpayers, and cannot take place without this plan. This is because the RTC sale of 10,000 acres, that is a necessary part of the Plan has a contingency clause which links the sale to the success of the Balcones Canyonlands Conservation Plan. With the plan the RTC sale of 200 million dollars in central Texas real estate can be finalized to the Texas Nature Conservancy for 15 million dollars. The contingency clause in the sales contract requires the completion of the Plan for the purpose of releasing other RTC properties for development. I have never considered it wise to sell over 200 million dollars of property to the Texas Nature Conservancy for the 15 million dollars that was negotiated. I believe that this is a lunatic idea, considering our federal deficit and I will continue to oppose anything that furthers this deal.

Sincerely,
Kathy Heidemann

Kathryn Heidemann
1002 Ash Street
Georgetown, Texas 78626
512/863-2935

Asset Type	Acreage	Estimated Benefit
REO Property	6,186 acres x $1,000/acre	$6,186,000
Limited Partnership Interests	496 acres x $1,000/acre x .5	$ 248,000
Totals	6,682 acres	$6,434,000

Additional monetary benefits as a result of the proposed transaction would accrue to the RTC in the form of (a.) reduced holding costs (especially exorbitant special district taxes) on properties sold in the bulk transaction, and (b.) reduced marketing times for residual properties. While the monetary benefits associated with residual properties are impossible to accurately predict, it is clear that the issuance of a regional 10(a) permit as a result of an approved regional habitat plan will positively affect the marketability of residual assets.

(Revised)
From RTC Sales Contract to Texas Nature Conservancy

From
RTC Sales Contract as
Revised for Sale to Texas
Nature Conservancy

NOTE DIFFERENCE BETWEEN SALES PRICE APPROVED IN CASE ACTIONS AND CONTRACT CONSIDERATIONS:

Original Negotiated Sales Price	$15,500,000
Less: Adjustment for Northlake Ranch Tract Subsequently Excluded from Package at $750/acre for 453 acres	($ 339,750)
Less: Adjustment of $1,000/acre for 100 acres of Lime Creek Road Tract Placed Under Contract to Melvin Simon & Associates Prior to TNC Executed Contract	($ 100,000)
Final Contract Consideration	$15,060,250

From
RTC Sales Contract as
Revised for Sale to Texas

February 11, 1992

County Judge Bill Aleshire
P.O. Box 1748
Austin, Texas 78767
473-9555
Now 15 million
Dear Judge Aleshire:

I still object to the proposed Balcones Canyonlands Conservation Plan (BCCP) and the related R.T.C. plan to sell 9,633 acres for endangered species habitat to Texas Nature Conservancy for ~~15.5~~ million dollars. Less than 1/3 of this property has been estimated to contain potential habitat for endangered species. This estimate has been based on satellite imaging that has not been proven to be an effective method for identifying occupied habitat. It is still unknown to me as to what portions of the R.T.C. property, as well as many private properties, may contain occupied habitat. The statement has been made that Travis County contains 50 percent of the existing habitat for the warbler. However, there has been no evidence presented to identify whether the habitat is classified as potential or occupied habitat. Even though enforcement strategies should differ in these two very divergent categories, the USFWS has not acted to designate critical habitat as they should. This should be done based upon species occupancy and economic impact. The fast approaching deadline for this designation under the warbler listing is May of 1992. I believe that it is ill-advised to make the decision to abandon valuable assets remaining in the R.T.C. land portfolio, based upon incomplete data and based upon incomplete due process. I am aware that the Pacific Legal Foundation is searching for a takings case in Travis Case. My concern is that the city and county appear to be on the road to accepting liability for any takings claims that may arise. I am convinced that there will be some because of the value of the land involved.

Even under diminished property values, this property is some of the most desirable hill country development property in our state. Improvement of this area is crucial to Austin's economy. There must be environmentally sensitive methods for development that will enable people to coexist with the natural environment. I consider your leadership in this direction to be essential to seeking an alternative plan to the present BCCP. I hope that you will research the possibility of expanding the Texas Private Lands Enhancement Program for private properties that are occupied by protected species. For federally controlled lands the designation of critical habitat should be utilized to determine those areas that can be released for environmentally sensitive development.

The BCCP is, as it presently exists, a funding mechanism proposed to replace federal enforcement activities that are under funded. The BCCP and the ESA are being utilized to delay development of private property to encourage passage of the local preservation plan. Another side effect of this plan is to switch

2

the burden of proof that a violation has occurred from the federal government, where it now rests, to a requirement that the landowner must prove his innocence. I believe that this contradicts every tenet of Texas and American law that exists.

The present BCCP scheme limits the take of potential bird habitat to periods when endangered songbirds are absent from the region. Without this plan, the ESA only restricts taking of warbler and vireo habitat during the spring and early summer when it is possible for private landowners to accidentally take a protected bird species during development clearing of occupied habitat. This plan extends habitat clearing restrictions to the remainder of the year over potential habitat whether it is occupied or not. Between August and February, development within identified preserve areas will be permitted only in exchange for habitat mitigation fees for the take of potential habitat as defined by USFWS. At least one fourth of the preserve areas identified do not contain occupied or potential habitat but landowners wishing to develop must so prove if they do not wish to pay the fee. This gimmick results in expenses for biological studies that can be cost prohibitive.

Additional funding mechanisms are planned for this conservation idea, in the form of a county tax increase (if a bond election passes), city revenue bonds, a utility service and/or water use fee and funding from local highway projects. These taxpayer derived fees will be combined with development mitigation fees for the total cost needed to purchase preserves for the plan. That total cost has been estimated anywhere from $ 200 million to $ 330 million over a thirty year period. Promoters of this plan are estimating costs for the first 20 years (from 184 million to 188 million) to downplay the expected cost to the community. There is no stretch of my imagination that can lead me to conclude that this is a cost-effective plan.

Developers in the Austin area have promoted this plan following lawsuits threatened by Earth 1st! against projects which have since sought their own individual "take" permits. However, rural landowners will continue to resist local funding for a federal program. We also must object to not having a guarantee from USFWS that the plan is sufficient to cover other species that have been petitioned for listing. Two new area species that have already been petitioned for listing in recent months are the Barton Springs Salamander and the American Mountain Lion (cougar). There has been no media coverage of the potential of the proposed listing of the cougar even though Lake Travis is a part of it's historical range.

When enacted by Congress the ESA was designed to prohibit the use of federal funds in projects that endanger listed species and to require federal agencies to preserve and recover those species and their habitat. Under the ESA, as amended, all persons and entities are prohibited from "taking" endangered species without a Sec. 7 incidental take statement (federally funded activities) or a Sec. 10a incidental take permit (all others) requiring minimization and mitigation for accidental take of species that occurs during development clearing.

Texas law allows cities, counties, and state agencies to

participate in land use planning for preservation of endangered species. Texas law has no incidental take concept that restricts development of private or public property when that development is judged to cause an incidental take of regulated habitat for endangered species. Under the Section 6 cooperative agreement between Texas and the USFWS, Texas law should be enforced until Texas law is changed.

The incidental take concept being used to restrict development in Travis County is found only in the regulations promulgated by USFWS to enforce court rulings regarding protection of habitat that has been mandated for actions involving Federal agencies. Every example of case law cited by environmentalists to justify local restrictions on habitat clearing are cases against Federal agencies that are required by the ESA to preserve and recover habitat. I have been unable to discover citations for any Texas case law regarding any action taken by USFWS against any landowner on private property for a violation of use restrictions in habitat.

This plan is a recovery plan that, if needed, is the responsibility of the USFWS, not private development. I believe this plan has been fraudulently promoted by the USFWS and the Texas Nature Conservancy for the hidden purpose of creating a local plan that exceeds the legally enforceable requirements of the ESA. A key reason for Texas Nature Conservancy involvement has clearly been to benefit financially from reduced land values while acting as an intermediary for the USFWS.

In my opinion, this plan will be the final tragedy for the local economy. This disastrous plan, having contributed to the demise of local savings and loans, now owned by R.T.C., will further devalue real estate beyond any possibility of rebound.

I protest the proposed sale of R.T.C. lands for this plan. I have protested to the R.T.C. without result. I have suggested to them that this proposal requires further study. My recommendation included consideration of placing use restrictions on the property before offering it for sale. It is my belief that a development plan under limited restrictions could replace the necessity for this conservation plan. I am told that a restriction plan was not considered advisable or even given any consideration at all. Under Section 4 of the ESA this can occur during designation of critical habitat proceedings.

I have sought from R.T.C. the public records disclosing the property appraisals and environmental studies used to evaluate the proposed discount sale. So far, officials at R.T.C. have failed to cooperate with my Freedom of Information Act request.

Now that the deadline for critical habitat designation is so near, it is unlikely that such designation can occur. In it's absence, I would like to suggest an alternative to accepting the proposed "fire" sale price from Texas Nature Conservancy. R.T.C. should seek a Section 7 development consultation with USFWS. This should include an application for an incidental take statement for a development plan for all R.T.C. properties. This

Now Available RTC Sales Center 1-800-677-3044 Austin TX. John Warren (Latrisha)

proposal is recommended to evaluate prospects for environmentally sensitive development under definite guidelines approved by USFWS for all R.T.C. properties. Under Section 7 the USFWS is limited in what can be required for an incidental take statement. Any conditions imposed by USFWS must be reasonable and prudent and are limited to those measures that are "necessary and appropriate" to minimize the impact....." Further, the regulations approved by USFWS in 1986 to implement the section 7 (b)(4)/7(o)(2) exception limit reasonable and prudent requirements to those which "cannot alter the basic design, location, scope, duration, or timing of the action and may involve only minor changes."

Once the incidental take statement and it's conditions are known, the RTC will be in a good position to offer all properties for sale to the highest bidder. At that time we can expect a high return to compensate taxpayers for the savings and loan bail out that has been worsened in Travis County by endangered species restrictions.

However, if the R.T.C. sale takes place without an incidental take statement under Section 7, and the BCCP is approved, the prospective buyers of other R.T.C. properties will be unable to develop without paying the fee for the Section 10a permit. This is the reason that there have been no willing buyers other than the Texas Nature Conservancy. For the economic welfare of Austin, the development plan needs to be approved while the property is controlled by a federal agency to benefit from the less strict Section 7 exception allowed under federal law.

It is my belief that we will successfully oppose funding for this plan. The R.T.C. would be well advised to consider this as an alternative plan during this interim period because we intend to see that funding will never be provided. I hope you will give this recommendation some thought and do what you can to forestall the R.T.C."fire" sale in Central Texas. This property should be made attractive by known restrictions and offered out to the general public for the highest bidder.

Very truly yours,

Kathryn Heidemann

Kathryn F. Heidomann
Hill Country Landowners Coalition
1002 Ash St.
Georgetown, Texas 78626
(512) 863-2935

Analysis of Economic Benefits to Residual RTC Holdings

The effect of the proposed transaction on residual RTC holdings is difficult at best to determine. The Travis County real estate economy has been adversely affected over the past seven years by a number of factors in addition to endangered species considerations, including a significant regional recession, the collapse of real estate markets (especially raw land markets) nationwide, the lack of available financing or venture capital to acquire or complete projects, and the implementation of a stringent comprehensive watershed ordinance by the City of Austin. While the endangered species listing of the Golden-Cheeked Warbler, the Black-Capped Vireo, and other indigenous species has definitely had a negative effect on the market, it remains difficult to extrapolate the sole effect of endangered species issues from the other negative factors at work in the submarket.

By any comparison, residual properties will be positively impacted by a regional 10(a) permit by virtue of the fact that landowners would not have to pursue individual consultations with the U. S. Fish and Wildlife Service. In some cases, such consultations could be performed relatively quickly and at minimal cost. In most cases, however, the consultation process would involve protracted study periods, costs to retain independent contractors, and in some cases significant costs to protect or acquire mitigation sites. By removing the uncertainties surrounding properties in the study area through the issuance of a regional 10(a) permit, residual properties will become more marketable.

The effect of a regional 10(a) permit will logically be different with respect to specific properties, and will be contingent upon such factors as the location of the property, access to the tract, topography, utility availability, zoning, and watershed considerations. Those properties that already have superstructures in place or have immediate access to utilities will likely be more positively affected than properties without such development capabilities. Similarly, those properties with active subdivision plats and required approvals through the City of Austin will see a more immediate value impact than more isolated or remote tracts. On the other hand, tracts that contain habitat but that have limited access and no utility commitments may see no immediate impact from a regional 10(a) permit.

After the proposed transaction, the RTC as conservator or receiver will own or control interests in 9,255 acres (per current inventories). Of this residual acreage, approximately 2,573 acres either do not contain habitat or have not been surveyed to determine the status of habitat. For purposes of this discussion, the 2,573 "unclassified" acres will be considered not to contain habitat, and thus the assumption will follow that little or no value impact will be caused by a regional 10(a) permit. The remaining 6,682 acres that the RTC will own or control have been identified as containing some habitat, and thus a regional permit should increase both the marketability and the value of these residual tracts. While a tangible value increase is almost impossible to quantify on an individual basis, much less an aggregate basis, conversations with appraisers, property owners, potential purchasers, and government officials have indicated that the potential value increase for habitat properties under a regional permit could range from $0/acre to $2,500/acre. Again, the potential effect will be property specific, but a conservative estimate with respect to the RTC's residual holdings can be narrowed to $1,000/acre. Based on this subjective estimate, the residual benefit to the RTC from the proposed transaction would be as follows:

Pamela K. Kelly
2208 Meadowbrook
Austin, Texas 78703

The Honorable Gerry E. Studds, Chairman
U.S. House of Representatives Subcommittee
on Environment and Natural Resources
Room 1334, Longworth House Office Building
Washington, D.C. 20515-6230

Re: Reauthorization of Endangered Species Act
Field Hearings, July 6, 1993

Dear Congressman Studds and Committee Members:

My father was a farmer and rancher in central Texas, as was his father and his and his. My family has owned land in Texas for over 150 years, and as far as I can tell, all of those generations were farmers or ranchers of some degree. I grew up watching the inherent risks of farming and ranching, as well as its rewards. Although I now live in Austin, I consider myself to be part of that rural community. Certainly it is a part of me.

Currently I work with the farmers and ranchers who lease my property to maximize their profits while preserving part of its natural state for wildlife. And we seem to be able to work together with mutual respect and trust. Many times I have listened to local cowboys and farmers reminisce about hunting or fishing as children on our property.

I could dramatically increase the income and the market value of my properties by clearing more woods for grazing or by filling in wetlands for more cotton. But I prefer to invest in a different kind of return--one of special places where my five year old and I can discover, observe and learn about wildlife and each other.

Recently I received a call from an engineer who lives in a wealthy suburb of Ft. Worth. He was looking for rural property to bring his young family to on weekends so that his children might know country life. He had grown up in our community and had spent his boyhood playing in the woods I am now trying to preserve. After I told him that I did not wish to sell any of it, he explained that he had been looking at a neighboring property which was "nice, but had no trees." And he was right. For miles in every direction, the woods I rode my horses through as a child are gone. For the most part, they were cleared by honest, hard-working people trying to provide for their families in the way in which they were skilled.

Our ancient ancestors understood their connection to the earth. They gathered its bounty and tolerated its harshness. They accepted the links of nature and their place in it. But recent generations have been overwhelmed with technological quick-fixes coupled with the very real struggle to survive financially. With the promise of milk and honey through the use of chemicals, what we have served instead to our children is a toxic soup. Environmentalists and farmers and ranchers do not need to be pointing fingers and circling the wagons. We

need each other. Farmers were the original conservationists. Our livelihoods depend on a healthy earth.

I not only value the expertise and guidance from the soil conservation agents available to me, I often depend on it. But their agencies are not always oriented toward the goals I am seeking. If our leaders had taken more seriously the imminent and long-range threats to our environment and been more supportive to these great reservoirs of expertise within the Department of Agriculture and U.S. Fish and Wildlife, scientists could have been assisting farmers and ranchers to implement a more holistic approach to using the land all along.

As a board member of the Mexican Wolf Coalition of Texas, I spend many volunteer hours informing the public about an animal that was, out of ignorance and fear, extirpated from this country. The deliberate eradication of the Mexican wolf from the southwestern ecology has caused numerous problems with the prey species this important predator no longer holds in check. Fortunately, through U.S. Fish and Wildlife's Mexican Wolf Recovery Plan, supported by the Endangered Species Act, we are pulling it back from extinction and will someday return it to the areas of wilderness where it belongs.

We are not taking care of the ecosystems of this planet from lack of biological, medical, ethical or even financial evidence urging us to do so. We are failing to take care of our environment out of political ignorance and fear. We are too busy butting heads or grabbing our piece of the pie to look around and see that we are destroying the very source of bounty for us all. With the loss of any species goes the richness of diversity and another degree of our wealth.

This is not about just me and my special feelings. It is about all of us. It is about each of us. It is about you. I truly believe that my child will appreciate that I gave my energy towards leaving him a cleaner, healthier world rather than a few more dollars in the bank. Twenty or thirty years from now when your own children or grandchildren review the history of this period, a turning point in the survival of their planet, I hope you will be able to say, "Yes, I did everything I could to speak for the things that could not speak for themselves." And then you can tell them how much courage it took to do that.

It is time to start listening to each other. And it is time to start listening to nature again. I urge you not only to protect the Endangered Species Act, but also to strengthen it and enhance it at every opportunity. And then, please, clearly support through education, incentives and technical assistance those of us out in the fields.

Thank you.

Sincerely,

Pamela K. Kelly

Pamela K. Kelly

The Real Estate Council
Of Austin, Inc.

301 Congress Avenue • Suite 2110 • Austin TX 78701
(512) 320-4151 • FAX (512) 320-4152

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August 3, 1993

Subcommittee on Environment and Natural Resources
Attn: Ms. Lesli Gray
Room 545
Ford House Office Building
Washington, D. C. 20515

Dear Ms. Gray:

I am writing on behalf of the Executive Committee of the Real Estate Council of Austin, Inc. (RECA) in regard to the reauthorization of Endangered Species Act and the Subcommittee's invitation to submit written comment. The Real Estate Council of Austin, Inc. is a trade association comprised of leaders in the commercial real estate industry as well as a cross-section of the business community (i.e. attorneys, bankers, CPAs, architects, engineers, developers, etc.). We have been actively involved through our membership in the debate and potential creation of the Balcones Canyonlands Conservation Plan (BCCP) to protect listed species in Austin, Texas.

RECA supports the preservation of endangered species and the concept of protection through a regional habitat plan and has worked actively in support of the BCCP. Having observed and participated in the BCCP Regional Plan, we are concerned with the process and its ultimate outcome. The divisiveness and abuse of this process needs to be addressed at the Federal level through further clarification, and by providing appropriate incentives and certainty in the Act. Otherwise, the potential of the Act backfiring and creating mass resentment and mistrust is inevitable. The reality in Austin, Texas, for example, has been a protracted, contentious process which has been ultimately damaging to the support for the species being protected.

RECA recommends to the Subcommittee on Environment and Natural Resources the following clarifications and reforms:

I. The listing process: Mistrust is prevalent in the regulated community for the endangered species listing process because of inadequate scientific data and compliance guidelines. In Austin, the ESA is often used to satisfy a no-growth agenda, eliminating any feeling of

certainty and damaging the support of the BCCP. The sentiment prevails that as soon as a regional plan is completed a new species will be listed negating the financial and time commitment invested, or, as with the cave invertebrates in Travis County, new scientific data may question the endangered species classification entirely, resulting in a potential de-listing of a species and overwhelming resentment and mistrust. Our recommendations to help minimize these conflicts are:

a. require that listing decisions are based on thorough review of all available data and disclose all differing opinions and conflicting data

b. require that listing rules describe the activities which would harm the species and the locations where those activities are regulated

c. require "Blue Ribbon" peer review of the entire listing decision

II. Permitting: The permitting procedures under Section 10 of the Act are lengthy, excessively expensive, and unclear for regulated landowners. Even those landowners willing and eager to comply are faced with confusion and uncertainty. Non-Federal projects do not have the benefit of the clear procedures and time frames applied to Federal projects under the Section 7 process. Small and low-impact projects cannot afford the expense and delay of the procedures. RECA recommends:

a. extend the Section 7 consultation process and time frames to non-federal projects

b. allow small and other low-impact projects to proceed under general permits similar to the Corps of Engineers Nationwide Permit program

III. Regional Habitat Plan: The creation of a regional plan is a concept we support although the process at the local level is fraught with conflict, due in great part to local politics, personal agendas and mistrust. The ESA could facilitate the creation of a regional plan through the implementation of strong guidelines and regulations on the creation process, beyond the scientific requirements. Control of the makeup, equity and authority of the creating body and the implementation of incentives for participation versus damages for non-compliance could streamline and improve the process and the community's confidence. In the Austin example, often the incentives are viewed as too costly for individual participation. Providing a model, or structure in the Act to create a regional plan, could potentially minimize the time, cost and frustration presently being experienced in Austin, Texas.

The Real Estate Council of Austin supports the preservation of endangered species. We continue to strive for a balance that will maintain a healthy

economy, while protecting our natural resources. We believe solutions do exist if we work together and respect the rights of others. Thank you for the opportunity to express our concerns and recommendations and for your consideration.

Respectfully,

Gary S. Farmer
President

cc: Representative Gerry E. Studds
Chairman, Committee on Merchant Marine and Fisheries

Representative Greg Laughlin
Subcommittee on Environment and Natural Resources

Secretary Bruce Babbitt
Secretary of the Interior

Senator Phil Gramm
Senator Kay Bailey Hutchison

Texas Delegation to the House of Representatives

Bill Aleshire
COUNTY JUDGE, TRAVIS COUNTY

Travis County Administration Building
P.O. Box 1748 Room 520
Austin, Texas 78767
512 473-9555

Thursday, June 3, 1993

The Honorable J.J. Jake Pickle
Member of Congress, 10th District
U.S. House of Representatives
Washington, D.C.

Dear Jake,

RE: STATESMAN Story today. Okay, I'm guilty of fanciful thinking. I think the Endangered Species Act is one of the most noble statutes ever enacted by any society. Only a sophisticated and caring society could recognize the importance of limiting human behavior so as to avoid reducing the biodiversity of our environment. The message of the Act is simple and noble: We will live on this Earth gently and respectfully.

That's fanciful thinking, I admit.

I think that a legislative body that enacts such a noble law should take full responsibility for funding its implementation. To implement the Act, it takes scientific research and analysis, surveys of potential habitat land, permanent preservation through acquisition and conservation easements of habitat, and ongoing, proper management of such preserves. Not one of these essential elements for implementation of this noble law is properly or sufficiently funded by the Federal government.

Without adequate funding of such a strong Federal law, regulation is applied in a blurred, unproductive fashion, as is occurring here in Travis County. For example, to this day no one has identified with clarity what land is and what land is not subject to restrictions under the Endangered Species Act in Travis County. This is a noble national policy that is deserving of adequate support from the Federal Treasury.

I see nothing wrong with those of us in Texas helping (through Federal taxes) to preserve the Spotted Owl while the folks in the states of Washington and Oregon help pay for preservation of the Golden Cheek Warbler here in Texas. I expect folks who say they support this noble bill to be willing to fill the till. Perhaps that's fanciful thinking, as well.

I think this is NOT a "local problem." I think saying that it is a local problem will doom this Act and the species and the overall quality of our environment. To place heavy financial responsibility on certain local communities and expect successful implementation of the Act for mobile species that don't recognize a city limits, county line, or state or national border is fruitless thinking. Without a national or international approach, it's like building the left side of a dam...what we do won't work, no matter how good that side of the dam is.

The way this system works now, habitat is allowed to be destroyed

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until the species is almost annihilated, then we regulate. Therefore, those who destroy habitat early and begin the destruction of the species pay nothing, while those who conserve the habitat the longest are the only ones who are subject to regulation and expense under the Act. As Bruce Babbitt has advocated, as a nation we've got to be more proactive and comprehensive in our quest to avoid the elimination of species and to encourage healthy biodiversity.

Well, I've taken the long way around to my point: I ask you to reconsider your public rejection (AAS 6/3/93) of my idea for USF&W to accept responsibility for managing the habitat preserves established under the Endangered Species Act. I suggested this idea several months ago, and just this week I asked Paul to set up a meeting so we could discuss this idea since SB 880 died. We count on you to do the impossible in Washington, because you've done it before. I need your help, advice, and advocacy for this idea.

I propose that we simplify a model for habitat conservation. I propose that private and public resources from Travis County be used to purchase biologically sufficient habitat land to earn a Section 10a permit for the entire county and that these preserve lands be turned over to USF&W for eternal management.

USF&W is already managing the beginnings of the preserve in the Post Oak Ridge area, thanks to your good work. Surely, there are economies of scale and scientific lessons to be achieved by having one management of our "local" preserve as well. You may find it to be a glorious national model for the Federal government to say: "If communities will make habitat land available in sufficient quantity, we'll take responsibility for properly managing those preserves with Federal resources so we can reconcile conflicts with the Endangered Species Act in your community."

Is it really better Federal policy and is it really going to cost the Federal government less to pay for raw enforcement of the Act in a community than to pay for the cost of managing the preserves?

Jake, at least do me this favor. Please ask USF&W what they think it would cost them to manage our preserves well.

We're all looking for alternatives to failure and this idea might be one of the best alternatives left. I'm sorry SB 880 went "foul", but we damned near worked a political miracle with that bill, and I'm not completely giving up hope for another turn at bat. However, I don't apologize to anyone for the standards I've tried to achieve for the BCCP or for the level of effort I've put into this issue.

I don't even apologize for a bit of fanciful thinking.

Sincerely,

Bill Aleshire

cc: County Commissioners

ISBN 0-16-041531-4